



The Official Journal of the Foundation For Amateur Radio, Inc.

JANUARY 1996



**FCC Highlights • ARRL Report • VE Exams Schedule
Public Service Report • DX Column • Regional Hamfests
Club Reports • Shack Sales • Much More!**



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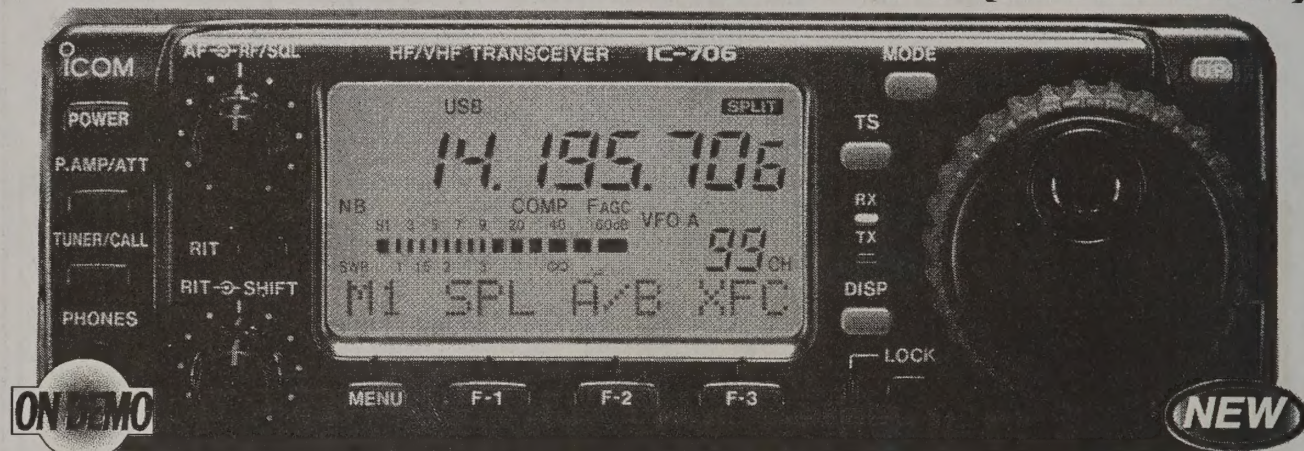
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If you didn't get our Dec. '95 Newsletter, Call-FAX-BBS, even mail to get on our mailing list.

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ICOM 706

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NEW



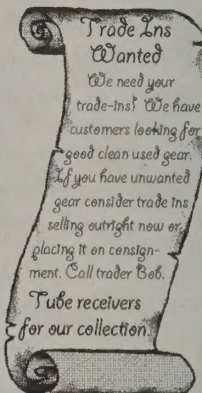
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ON DEMO

25th

Anniversary

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Regional Hamfests and Other Events

January 6/7	City of Palms Hamfest, Ft. Myers, FL
January 13/14	17th Annual Hamfest & Computer Show, Sarasota, FL
January 13	Skyline ARC - Marathon, NY
January 13	Harrisburg RAC - Oberlin, PA
January 20	16th Citrus County Hamfest/Computer Show, Crystal River, FL
January 21	Hamferst, Pinellas Park, FL
January 21	Frostfest '96, The Showplace, Richmond, VA
January 24	Baltimore ARC "It's Free" Mini-Fest - Timonium, MD
January 28	Post Holiday Swapfest and Fleamarket, Odenton, MD
February 3/4	Tropical Hamboree, Miami, FL
February 10	Hamfest, Charleston, SC
February 10	Hamfest, Pensacola, FL
February 10	Hamfest, Arcadia, FL
February 11	Chestnut Ridge ARC - Latrobe, PA
February 16/18	Hamfest, Orlando, FL
February 25	Winterfest, Vienna Wireless Society, Vienna, VA
March 17	Two Rivers ARC
March 17	Keystone VHF Club - York, PA
March 24	Delaware Valley RA - NJ
March 30/31	Baltimore ARC - Timonium, MD
April 13	Appalachian ARG - Fredericksburg, PA
April 21	Penn-Del RC - New Castle, DE
April 27	Liverpool ARC - Syracuse, NY
May 5	Warminster ARC - Wrightstown, PA
May 31 - June 1	Rochester Hamfest - Rochester, NY
June 9	Central PA - Winfield, PA
July 4	Harrisburg RAC - Bressler, PA
July 28	BRATS - Timonium, MD



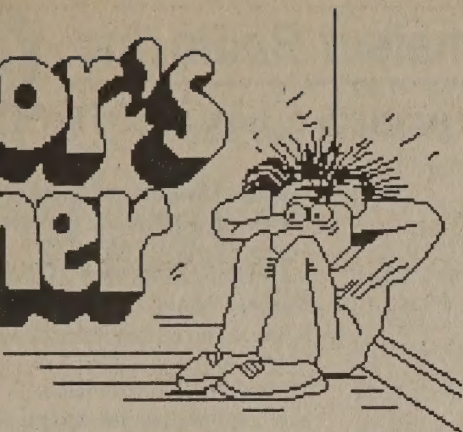
(Photo by Jim Dula, N3PMP)

On The Cover

Pictured on this month's cover of *Auto Call*, is W. Page Pyne, WA3EOP, the Foundation for Amateur Radio's "Ham of the Year" operating the 40 meter SSB station at the Antietam Radio Association's Field Day exercise last June. The ARA, W3CWC, made a presentable score with Page's help. Page's contributions to the amateur radio community can be found on page 26.

Editor's Corner

By John Queen
KAØSEY



Antenna Farms. What does that conjure in your mind when you think about the ultimate collection of amateur radio antennas? To at least one ambitious ham radio operator, the ultimate antenna farm lies somewhere in the great state of Wisconsin. Undoubtedly, his farm has been well fertilized and could arguably be one of America's largest collection of ham radio antennas.

According to the 1995 edition of the *Amateur Radio Almanac*, his antenna farm consists of the following: for 10 meters, four five-element beams at 55, 90, 125 and 160 feet on a rotating tower; four three-element beams at 100, 120, 140, and 160 feet; a five-element Yagi at 195 feet; a four-element Yagi at 80 feet; a three-element Yagi at 30 feet; and an eight-wavelength Rhombic fixed on Japan. For 15 meters, four four-element beams at 110, 140, 170, and 199 feet; two five-element beams at 70 and 110 feet; a five-element Yagi at 180 feet; a four-element Yagi at 40 feet; a three-element Yagi at 35 feet; a six-wavelength Rhombic fixed on Europe, and another one fixed on Japan. For 20 meters, two six-element beams at 90 and 150 feet; a five-element Yagi at 105 feet; a four-element beam at 60 feet; four four-element beams at 80, 120, 160, and 195 feet on a rotating tower; two four-element beams at 35 and 70 feet fixed southeast; and a four-wavelength Rhombic fixed on Europe. For 40 meters (are you still with me?), two three-element beams at 70 and 190 feet and a three-element Yagi at 70 feet. For 80 meters, a four-element inverted-V beam at 160 feet; a five-element vertical beam; a bi-square; and four 520 foot Beverage receiving antennas. And lastly, for

160 meters, seven 1040 foot Beverage receiving antennas; one 2200 foot Beverage antenna; a three-element wire Yagi at 100 feet; a four-element vertical beam; a full wave loop; an extended double Zepp; a sloping dipole; a dipole, an elevated 1/4-wave vertical, and a partridge in a pear tree.

Now don't get me wrong. I'm not saying that this gentleman indulges in excess, but it's evident that this guy has enough metal in his backyard to make the U.S. Steel Corporation blush. When is too much, too much?

Kathy and I live in a subdivision where antenna restrictions are a fact of life. We're lucky to have a G5RV hidden between the trees in the backyard and an Isoloo up in the attic. But we can't complain. Collectively, we've worked all 50 states, 40 some odd countries and 2 Sony Trinitron televisions with this arrangement. Would we like a tall rotating tower with stacked Yagis? Sure! Who wouldn't? Are we ready to dismantle two aircraft carriers and build the ultimate antenna farm? No!

So what's the point of all this? Quite simply, it drives home the old adage that "ham radio is fun" irregardless of what equipment you have. If your dream is to build an Eiffel tower in your backyard, but your budget or other factors prevent you from doing so, don't sweat it! Make the most of what you have. Go out there and work the bands. It may be more challenging, but then again, that's where the fun begins.

73's, de KAØSEY, John



MEMBER CLUBS

Adams County Amateur Radio Society	Montgomery Amateur Radio Club
Alexandria Radio Club	Montgomery Auxiliary Communications Service
Amateur Radio Research and Develop. Corp.	Moose Amateur Radio Club
AMSAT - Radio Amateur Satellite Corporation	Mount Vernon Amateur Radio Club
Anne Arundel Radio Club	National Capitol DX Association
Antietam Radio Association, Inc.	Naval Research Laboratory Radio Club
ARINC Amateur Radio Club	NOAA Amateur Radio Club
Arlington Amateur Radio Club	North Point FM Association
Baltimore Amateur Radio Club	Northern Virginia FM Association
Baltimore Radio Amateur Television Society	Northern Virginia Radio Club
Capital City Amateur Radio Society	Ole Virginia Hams Amateur Radio Club
Capital Hill Amateur Radio Society	Opequon Radio Society
Carroll County Amateur Radio Club	Pentagon Amateur Radio Club
Central Maryland Amateur Radio Club	Potomac Area VHF Society
Chaverim of the Greater Washington Area	Potomac Valley Radio Club
Columbia Amateur Radio Association	Prince George's Wireless Association, Inc.
Culpeper Amateur Radio Association	Prince George's County ARES/RACES
D-MARC - Digital Mid-Atlantic Radio Council	Quarter Century Wireless Association, Inc.
Department of State Amateur Radio Club	Baltimore Chapter #20
Fauquier Amateur Radio Association	Del-Mar-VA Chapter #150
Frederick Amateur Radio Club	Shenandoah Valley Chapter #137
Frederick Amateur Repeater Group	Vic Clark Chapter #91
Goddard Amateur Radio Club	Washington Chapter #23
Green Mountain Repeater Association	Rock Creek Amateur Radio Association
Herndon Repeater Group	St. Mary's County Amateur Radio Association
Historical Electronics Museum Amateur Radio Club	Shenandoah Valley Amateur Radio Club
IBM Amateur Radio Club	Southern Maryland Amateur Radio Club
Johns Hopkins University APL ARC	Southern Patuxent Amateur Radio Club
Laurel Amateur Radio Club	Stafford Amateur Radio Assn.
Leisure World Amateur Radio Club	Sterling Park Amateur Radio Club
Loudoun Amateur Radio Group	Summit Amateur Radio Association
MD/DC MARS (Navy Marine) Association	Tri-County Amateur Radio Club
MADRAS	T-MARC, Middle Atlantic Repeater Council
Maryland Emergency Phone Net	Vienna Wireless Society
Maryland FM Association	Voice of America Amateur Radio Club
Maryland Mobileers Amateur Radio Club	Waldorf Repeater Support Group
Mercury Amateur Radio Assn., NE Area	Washington Adventist Amateur Radio Assn.
Metropolitan Communications Network	Washington Area Young Ladies ARC
Metrovision Amateur TV Club	Woodbridge Wireless, Inc.
Mid-Atlantic DX & Repeater Assn.	

NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. Visitors are always welcome! The next meeting will be held January 10 at the Lee Center, Alexandria, Virginia. Take Capitol Beltway to Exit 1 (US 1 North). North to the second traffic light, left on Gibbon Street to Fayette. Left on Fayette to dead end at Lee Center Parking Lot. The meeting is conducted in the conference room near the main office of the center.

Talk-in on
146.55



FCC Highlights

By Jack Kelleher.
W4ZC

Vanity Callsign System delay?

The FCC has received two petitions for reconsideration of the proposed provision that prohibits a close family member from obtaining the callsign of a deceased amateur unless the applicant has at least the same class license class. This provision was not included in the first version of the proposed Rules governing the Vanity Callsign System, but was added at the behest of David B. Popkin (W2CC), who wanted the rule revised to prohibit an applicant from obtaining a callsign for a higher operator class simply because the callsign was once held by a relative now deceased. Popkin wanted to be able to determine the license class held by the station's licensee from the call sign alone.

The FCC decided that allowing an amateur with a lower class of license to obtain the higher class call sign could result in unfair assignments, and so the requirement for equivalent class was included in the recent Memorandum Opinion and Order (M.O.O.).

The M.O.O. was published in the Federal Register, but the proposed rules do not become effective until 30 days after publication, during which period petitions can be filed for further reconsideration of the proposed Rules. Code speed requirements (again)

Three Technician class amateurs have written to the FCC seeking changes in the General class telegraphy requirements. Alan N. Selin, WA1AGK, Naples, FL; Christopher S. Salinas, NØTTW Brainerd, MN; and Clifford R. Todd,

KB5YSW, Carthage, TX wrote separate letters to the FCC which the Commission treated as Petitions for Rulemaking.

These individuals wanted to substitute 5 wpm for the 13 wpm telegraphy requirement necessary to qualify for a General Class operator license. Mr. Todd's letter was signed by seven other amateur service licensees. Todd and Selin also requested that holders of the Technician-Plus Class operator licenses be granted General Class operator privileges.

The FCC ruled that "The current amateur service license structure and examination requirements were developed in accordance with the expressed desires of the amateur service community through numerous rulemaking proceedings that generated thousands of comments. The amateur service indicated on each occasion that it strongly desires to preserve communications by telegraphy. After considering the views expressed in these proceedings, the Commission adopted the rules that are codified in Part 97.527. The requestors have not presented sufficient evidence to justify revisiting these matters at this time."

RF Light Bulbs get FCC Approval.

According to the ARRL Letter for November 9, the FCC has waived its rules to permit the General Electric Company to begin marketing an RF light bulb. The Commission waived at GE's request, FCC Rules Part 18 limits on the amount of RF energy that may be conducted into the electric power lines by RF lighting devices in the band 2.2 to 2.8 MHz.

The FCC said that there has been "no record of significant interference problems from the use of these devices in commercial environments", and also said that radio operations in the 2.2 to 2.8 MHz range "are not normally employed or intended for reception in residential environments.

Continued next page

The ARRL will obtain samples of the GE bulbs for testing as soon as they are available. ARRL Laboratory Supervisor Ed Hare, KA1CV, said that the new bulbs should not, if properly designed, create any more interference to Amateur Radio operations than fluorescent bulbs, dimmer switches or other similar devices found in the home.

The Family Radio Service (FRS)

The proposed FRS is not related to the Amateur Radio Service per se, but we have covered it previously and will continue to cover it in view of the implications of non-licensed operation; and in view of previous happenings in the Citizens Band Radio Service. (The CB service went from licensed to unlicensed operation and, of more concern, operated outside of its channel assignments).

On July 20, 1994 the Tandy Corporation filed a petition for Rule Making to use channels in the UHF spectrum for a new Family Radio Service (FRS) "without the burdensome licensing and technical requirements of existing radio services". The FRS Service, as proposed, would use 500 mW transceivers on 16 channels in the General Mobile Service (GMRS), a licensed personal radio service for individual use. (These frequencies are in the 460 MHz region of the spectrum).

The FCC accepted the Tandy proposal on July 26, 1994 assigned it the file number RM-8499 and put the item out for a 30-day comment period. After studying the submitted comments, the FCC issued a Notice of Proposed Rulemaking (WT Docket No. 95-102) with a deadline of October 2 for Comments, and October 16 for Reply Comments. (See *AutoCall*, October 1995, page 8).

This proposed service is referred to in some quarters as a new category of Citizens Band Radio, and "FM CB". However, the GMRS, often mistakenly called "The old Class A CB", has little historical connection to Citizens Band radio and predates it by many years.

GMRS is one of the fastest-growing land

mobile radio services, and sophisticated radios for the service are available in the \$150.00 price range. There are over 35,000 GMRS stations, mostly used for private and family communications and for volunteer public service groups. As might be expected, these users are against the proposed service because they foresee major interference problems. The FCC's comments, in the NPRM, indicate that the Commission intends to establish the Service essentially as proposed.

The W5YI Report for November 1, 1995 contains excerpts of reply comments from the Tandy Corporation, the Personal Radio Steering Group (PRSG), Cobra Electronics Corp., Bennett Z. Kobb, and Motorola Inc. PRSG continues to voice the fears that interference to GMRS operations will be significant; the manufacturers favor approval of the system, and Mr. Kobb disputes the requirement for 14 channels.

Other proposals

Another petition, filed by Flash Comm Inc., a joint venture of the Harris Corporation and Lexmark, proposes a "Messaging and Location Tracking Service (MLTS)" using 10-watt unlicensed mobile transmitters operating at HF (3-30 MHz). These radios could choose ANY (emphasis added) channel in the entire 3-30 MHz range. (Harris Corp. is the well-known manufacturer of electronics, broadcast and printing equipment; Lexmark was formerly the IBM typewriter and printer division!).

According to the W5YI Report, long-haul truckers and other transportation users are key markets for MLTS. The vehicle radios would receive messages from non-HF stations. They would use the HF bands on a secondary non-interference basis to communicate with regional base stations, from which messages would be relayed to customers.

The petitioners claim that there will be no interference to primary licensed HF radio users from the system's operation in the 3-30 MHz band.

Flash Comm said that unlicensed units will include these safeguards:

- "Examination of potential transmit frequencies in use by others before transmission. The device may transmit on any one of 9000 channels in the 3-30 MHz band that it finds to be clear.

- "Transmission time of five seconds maximum, two seconds average, with noise-like emission. The worst case interference is perceived to a voice user as a short burst of low level noise, much like a common channel "fade". Interference to data users would also be minimal, as existing data systems must also contain an effective means of dealing with channel fades.

- "Long and random time intervals between consecutive transmissions on the same frequency.

- "A very low transmit power (10 W out of the final amplifier into a 50-ohm load, using a maximum 3 kHz wide signal,

"The effective radiated power out of the MLTS user device antenna is typically less than 10 watts — more on the order of 2 watts at the peak of the antenna pattern, due to the use of manageable lengths on mobile platforms.

"Accordingly, in the unlikely event that an MLTS transmission occurs in an interference mode and arrives at an unintended receive station above the noise floor at that station, it will often be sufficiently below the intended signal level so as to be imperceptible.

"Since the MLTS system will be required to choose clear frequencies on a near real time basis, the likelihood of hitting a co-channel primary user multiple times in a short period is highly unlikely. First, the next time a frequency is being selected, the system will most likely determine correctly that the frequency is used and not choose that particular frequency again. Also, since the initial frequency choice was made, another frequency may be

predicted to have a better propagation effectiveness. Therefore, the system would not choose the same frequency again, thus further minimizing the probability of revisiting occupied frequencies.

Unlicensed operation is desired. The proposal goes on to say: "Mature MLTS systems may result in hundreds of thousands of remote user devices implemented across the United States. The requirement to license such a large universe of user devices would severely tax the Commission's resources while adding substantial delay in the implementation of any MLTS service for no real benefit. Therefore, Flash Comm believes that MLTS should be authorized on an unlicensed basis.

"Because of the extremely large number of MLTS units envisioned for field operation, effective regulation by policing individual users would be administratively impossible. Compliance may be assured by treating persons violating the MLTS rules by using modified or non type accepted equipment as operating without proper authorization in violation of Sections 301 and 302 of the Communications Act. Enforcement under Section 401 of the Act would provide civil and criminal penalties."

(Ed: This proposal reads as if the problems, if any, are minimal. I for one don't think that they are; and the problems foreseen are not only technical, but regulatory. I'm concerned about the intent to use any frequency in the HF band, albeit allocated/assigned to amateur, maritime or aeronautical mobile, or other authorized services. "What if" these signals cross international borders and interfere with services in Canada, Mexico or other countries in the North American region?)



Reminder - all submissions for

AUTO CALL

are due no later than
the 1st of the

month prior to the month of publication!!



American Radio Relay League Report

By John Swafford,
W4HU

The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

League increases electronic forms offerings, prepares to introduce Contest Yearbook.

In an effort to make ARRL contest forms more quickly and easily accessible, the League offers them electronically via its automated information server (that also contains a wealth of other files). Concurrently, contest announcements in QST have become shorter and more "user friendly," aimed at acquainting newcomers with the general outline of each contest, how to operate in it, and what awards are available for participation and achievement.

Printed copies of the complete rules for all ARRL contests will be made available in a new publication called *The ARRL Contest Yearbook*; the 1996 edition of this booklet will be available in December, by mail, for \$5. Also included in the *Yearbook*, by downloading summary sheets and generating one's own log and dupe sheets (that are automatically generated by the contest software now widely available and used).

The ARRL's Automated Information Server is at info@arrl.org. Send a new message to

info@arrl.org for each batch of requests. Each line of the message should contain a single command.

Valid info e-mail commands are:

help (Sends this help file);

index (Sends an index of the files available from info).

send filename (Sends "filename")

quit Terminates the message.

*.RLS files are the rules for the different contests; *.FRM files are entry summary sheet files that can be edited with your contest result data. Use an ASCII text editor when inserting your contest data.

RF light bulbs get FCC approval; General Electric plans to market

The FCC has waived its rules to permit the General Electric Company to begin marketing an "RF lightbulb." The Commission waived, at GE's request, FCC Rules Part 18 limits on the amount of RF energy that may be conducted into the electric power lines by RF lighting devices in the band 2.2 to 2.8 MHz.

GE proposed marketing to consumers an unlimited number of RF light bulbs that comply with the conduction limits for nonconsumer RF lighting devices in this band. (FCC rules already permit RF lighting devices used in commercial environments to place this signal level on the AC power lines.)

The FCC said that there has been "no record of significant interference problems from the use of these devices in commercial environments," and also said that radio operations in the range 2.2 to 2.8 MHz "are not normally employed or intended for reception in residential environments."

GE was granted a waiver for one year, and the FCC reserved the right to revoke it if it determines that RF lighting devices operating under the conditions of the waiver create "severe interference problems."

Three years ago a California company, Intersource Technologies, promoted an RF-powered lightbulb that operated at 13.56 MHz and was designed, according to the company, to keep unintentional radiation to a minimum (a story appeared in August 1992 QST, page 49). A 25-watt RF bulb was said to generate as much visible light as a 100-watt conventional bulb. These bulbs were never marketed.

The ARRL will obtain samples of the GE bulbs for testing as soon as they are available. ARRL Laboratory Supervisor Ed Hare, KA1CV, said that the new bulbs should not, if properly designed, create any more interference to Amateur Radio operations than fluorescent bulbs, dimmer switches, or other similar devices found in the home.

Tucson Amateur Packet Radio Adds Sound on WEB

Tucson Amateur Packet Radio Inc (TAPR) has added an audio "virtual meeting, workshop, and seminar page" to its Home Page on the Internet according to TAPR President Greg Jones, WD5IVD. The address is <http://www.tapr.org/>

TAPR is evaluating a "RealAudio" system to present packet radio meetings and presentations. The system only allows six concurrent connections, so if you find that an audio channel is busy, try later, Jones said.

The new audio selections include: The March 1995 TAPR annual meeting in St Louis, with a TAPR/AMSAT workshop and a seminar on error control coding by Phil Karn, KA9Q;

A National meeting of repeater frequency coordinators on October 7, 1995, near St Louis, including talks by Ralph Haller, deputy chief of the FCC Wireless Telecommunications Bureau, and ARRL President Rod Stafford, KB6ZV; and

An interview with TAPR President Jones on the syndicated radio program "Ham Radio and

More," August 13th, 1995. The TAPR Home Page also contains a primer on amateur packet radio and other packet-related material.

Tucson Amateur Packet Radio also is available by mail at 8987-309 East Tanque Verde Rd, No. 337, Tucson, AZ 85749 (817-383-0000); by e-mail at: tapr@tapr.org and by ftp at: <ftp://ftp.tapr.org>

Austrians Honor Millennium with Special Calls for Hams

The Republic of Austria will celebrate its millennium—its 1000-year anniversary—in 1996, by authorizing special call sign prefixes for radio amateurs.

At the request of the Austrian Amateur Radio society, OVSV, the Austrian communication authorities will permit Austrian amateurs to use the prefix OEM for the entire year 1996, OVSV President Dr Eisenwagner Ronald, OE3REB, said. Use of the prefixes will be voluntary. As an example, OE1XA may be changed to OEM1XA.

OVSV will sponsor two on-the-air (and shortwave listener) operating awards in conjunction with the special prefixes. Details on these awards will be announced elsewhere.

SETI League, Microwave Outfit Reach Agreement

The nonprofit SETI (Search for Extra-Terrestrial Intelligence) League has entered into an agreement with Down East Microwave Inc. The company, owned by Steve Kostro, N2CEI since 1994, is located in Frenchtown, New Jersey, and manufactures equipment for amateurs for 6 meters and above.

Under the agreement, according to SETI League Executive Director Paul Shuch, N6TX, Down East Microwave will produce and market amplifiers, filters, down converters, and other

Continued next page

receive equipment designed by SETI League engineers, with profits to be donated to the SETI League's research fund.

Kostro said that "radio amateurs are in a unique position to succeed where government agencies have thus far failed. SETI is no longer science fiction, but mainstream science, and Down East Microwave is pleased to have a role in this important research."

An article about the search for extraterrestrial intelligence and the role that radio amateurs can plan in it appeared in August 1995 QST on p. 37.

BRIEFS

* If you have trouble getting through on the telephone to HQ with the new 860 area code, tell your local phone company. A few callers have experienced difficulty. The old 203 area code still works, too.

* If you were active in relief efforts during or after one or more of this fall's hurricanes, please send your report or story to ARRL Field Services Manager Rick Palm, K1CE, by January 1, 1996!

* Nominations are open for ARRL Instructor

of the Year awards: the ARRL Herb S. Brier award (nonpaid volunteer instructor); the ARRL Professional Educator of the Year (paid, professional teacher); and the ARRL Professional Instructor of the Year (paid, but not certified, teacher). Send nominations to your ARRL section manager by January 31, 1996.

* Do you use your personal computer in the shack in any unusual way? Do you have a favorite piece of ham related software that you think is much better than other programs? Do you know of any freeware of interest to the ham community? If so, contact Paul Danzer, N1II at HQ: pdanzer@arrl.org

* Improve your antenna system by signing up for the ARRL workshop "Computer Aided Antenna/System Design of HF/VHF Stations" at the Miami Airport Marriott on Friday, February 2, in conjunction with the Miami Hamboree. The five-hour session will be conducted by ARRL Senior Assistant Technical Editor Dean Straw, N6BV, and includes a workbook. The fee is \$15 for ARRL members and \$20 for nonmembers. To register or get details, call Educational Activities Department Manager Rosalie White, WA1STO, at 860-594-0237. Space is limited, so please call by January 24.

ARRL AWARD NOMINATIONS OPEN NOW

Nominations are now being sought for the 1996 awards to be presented at the ARRL Atlantic Division Convention. The Convention is held in association with the Rochester, NY, Hamfest, May 31 - June 2, 1996. The awards are commemorated by handsome plaques to be presented at the hamfest banquet.

"Amateur of the Year" nominees should be outstanding all-round Amateurs from the Atlantic Division with a strong record of service to the Amateur community. An award for lifetime service to Amateur Radio, the "Grand Ole Ham," is open to Atlantic Division OMs and YLs who have been licensed at least 30 years or are at least 50 years of age. The Atlantic Division "Technical Achievement" award may be presented to an individual or to a group.

Complete information on the awards and nomination procedures is available from the Rochester Hamfest, 300 White Spruce Blvd., Rochester, NY 14623 (telephone during regular business hours at 800-724-8515 or 716-424-7184). The deadline for nominations is April 1, 1996.



Elmer's Corner

By Paul E. Wilkins,
AB4CY

The Wandering Sun

The Sun has a lot to do with earthly radio wave propagation. High in the summer sky its radiation stimulates a strong D layer in the ionosphere that soaks up lower HF. At the same time it energizes the higher F layers that refract higher frequencies.

Low in the sky in winter, the density of all layers of the ionosphere decreases and of course at night the layers of the ionosphere fade away and long distance skip propagation “dies” and reappears only after the sun rises the next morning. The degree of ionization depends a great deal on radiation from the sun that takes place when the surface of the sun exhibits sunspots which are really magnetic storms in the sun’s atmosphere that eject large amounts of ultra-violet, xray and particle radiation.

The ancients watched the daily position of the sun much more carefully than most of us do today. The calendar was invented to predict when the sunlight was right for planting crops, the occurrence of the spring floods, and the beginning of new years, etc. The Egyptians and the Maya were concerned with the daily “rebirth” of the sun.

During the spring in the northern hemisphere the sun climbs higher in the sky each day until the summer solstice (longest day of the year) on June 21st. As the days go by it begins to sink slowly toward the horizon until it reaches its lowest point at the winter solstice (shortest day of the year) on December 21st. Many ancient pagan festivals were timed to celebrate the “return” of the sun. Since it takes a few days to be sure the Sun has stopped sinking this worked out to be around December 25th. and the start of a “new” year.

Since the sun rises and sets at a different time each day of the year the beginning and end of band openings tends to follow the seasons. Summer openings on 80 and 160 are rare, however with the reduced sunlight intensity we see these bands flourish in winter.

When there are solar flares, which are eruptions of tremendous jets of very hot gas from the sun’s surface sometimes half a million miles long, the effects can all but wipe out our earthly radio communications. The magnetic effects of these flares used to make long line telegraphy and telephony impossible. They have been blamed for interruption of long distance power grids, resulting in temporary blackouts. The effect of these flares arrives about 24 to 36 hours after they are observed.

Light from the sun takes about nine minutes to make the same journey. The sun rotates about every four weeks so serious disturbances tend to appear again in about four weeks.

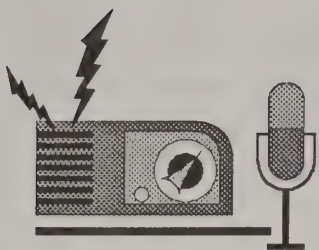
The sun itself radiates a lot of radio energy. This was discovered during Radar development during WW2. The solar “noise” observed at 2800 MHz has been measured daily for more than 50 years because it was found that the intensity of this radiation correlated well with the F layer ionization observed here on earth.

WWV broadcasts solar flux information every hour and the propagation charts in QST are based on predicted solar activity. WIAW bulletins update the propagation charts between issues.

At one time you could tune in on the morning activation of the ionization taking place in the upper layers. You could hear a weak noise on 80 meters that sounded like a large flock of birds chirping. They called it “the dawn chorus”. Unfortunately today’s noise levels mask this phenomenon.

The “grey” line is the boundary between daylight and darkness where the lower D layer is dissipating but the F layers (which are higher and

Continued on page 15



DX DX DX

By John Kanode,
N4MM

TORN LOYALTY

In today's mobile world, many amateurs belong to several radio clubs. A lot of members of radio clubs participate in the ARRL DX contests, the ARRL 160 and 10 meter contests and the ARRL SS contest and do submit logs for these activities.

There is an ARRL Club Competition Program and club members can list their score for their club. Here is the dilemma, which club does the member list, when he belongs to two clubs who are participating in the program. The problem is brought on by the fact that many clubs share overlapping areas for contest competition purposes.

There are three categories for club competition, Unlimited, Medium and Local. The area for the Unlimited clubs is 175 miles. The big unlimited clubs are recruiting members all the way out to their limits in order to be top dog in this category.

This is causing some hard feelings within the smaller clubs who do or want to participate in the club competition program. It is due to the fact that the participating member who belongs to two clubs can only submit his score for only one club. This is what is causing the problem. Some amateurs who would like to belong to two clubs will not join one of the clubs because of this conflict. Some participate but do not submit scores due to this situation.

The bottom line is that it is causing amateurs to shy away from dual club membership, participation in the ARRL contests and is generating ill feelings between amateurs. What can be done to correct this unwanted situation?

There are several minor changes that can be made to the club competition program to eliminate this problem.

1. Reduce the area of the Unlimited clubs, this would reduce some of the overlapping problem. This takes something away from someone and is not a good solution.

2. Allow amateurs who hold membership in several clubs to submit their scores for both clubs as long as the two clubs are not in the same category. If a member belongs to club A, which is an Unlimited club and belongs to club B, which is a Medium or Local club, he could submit his score for both groups due to the fact that the two clubs are not in competition with one another. This solution takes nothing away from anyone and will encourage more amateurs to become active in the ARRL contests. Some will not participate now due to the TORN LOYALTY situations they rather not participate than to create hard feelings with other members.

If the change suggested in item 2 were included in the ARRL Club Competition rules, what would it cost the League to implement it? No additional gavel would be required, there would be a few more club certificates to be issued due to the fact that more smaller clubs would start to participate in the program. There would be a few more lines of print in the contest write-ups in QST. My best guess is about \$300 to \$500 a year for all ARRL contests with club competition. One of the ARRL goals is to get clubs more involved in ARRL programs, here is a good opportunity to do this at very little cost and to eliminate some hard feelings at the same time.

UPCOMING DX CONTESTS

ARRL RTTY Roundup	January 6-7
Japan Int'l DX Contest CW	January 12-14
HA-DX Contest	January 21
CQ WW 160 Meter DX CW	January 26-28
REF French Contest CW	January 27-28
UBA Contest Phone	January 27-28

Continued next page

DX BULLETIN OFFERS 50TH ANNIVERSARY DXCC AWARD

The post war DXCC program started on November 15, 1945. To commemorate the 50th anniversary, the DX Bulletin is offering a special DXCC Award for the first 250 DXers who works 100 countries on or after November 15, 1995. No QSL's will be required. Just sent list of QSO data. The award is free and the awards will be numbered. The date of the 100th country will determine the award number. The address for the DX Bulletin is P.O. Box 50, Fulton, CA 95439-0050.

TIDBITS

A Russian Callbook is available on two 3.5 disks from SM7DEW. It covers the 12 CIS Countries, specializing in direct QSL addresses for all over the CIS since 1989. It is updated twice a year and is distributed by Jan Bexner, SM7DEW, Villa Dalen Berghem, 5-34191, Ljungby, Sweden. Please write him for rates and more info.

W8GIO, who is the QSL Manager for C915, C9RDM and HZ0ZBJ and others, will NOT answer bureau cards. QSL direct only.

The "Most Wanted DXCC Country Survey" results are out. The ten most needed countries are:

1. Bhutan A51
2. Andaman VU4
3. Heard Is. VK0
4. Yemen 7O
5. Libya 5A
6. Macquarie Is. VK0
7. Tromelin FR/T
8. Laccadive Is. VU7
9. Mount Athos SV/A
10. Burma XZ

Of course the most needed country is North Korea, but the survey was conducted before North Korea was added to the DXCC Country List. With recent operations in XZ, that country should move

down the list. If the recent 5A operations are ever accredited, that one should move down in the most wanted list.

There is a amateur going to Macquarie Island in December, and if he is active from there, that one should move down too. The Heard Island DXpedition has been postponed for a year, so that one will either stay where it is or move up the list.

Bad news on the Heard Island DXpedition. It has been postponed for one year. There were serious problems with the ship that they hired to take them out to the island. It was a very unsafe vessel and it was doubtful that it would make it out to the island and back without sinking. The DXpedition organizers had put up a large deposit on this ship and when they requested their money be returned, the owner disappeared. They took a big hit. Things are a bit unsure now but they are planning to try again next December or January.

Elmer's Corner, from page 13

still in sunlight) and are still active. A grey line window opens for about an hour and is most useful for low angle radiation antennas.

Years ago, I once took a home-brew receiver apart several times over a weekend because it had lost "sensitivity". Little did I know that there was a magnetic storm in progress and the best receiver in the world wouldn't have had any sensitivity either.

DAVE PHILLIPS 703-361-5161

SHEEHY NISSAN MITSUBISHI

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(AT ROUTE 28 AND LIBERIA AVE.)



1996 ARES CALENDAR



January

S	M	T	W	T	F	S
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January

- 1 New Year's Day
- 15 Martin Luther King, Jr.
- 19 Special Olympics, Reston, VA

February

- 12 Lincoln's Birthday
- 14 Valentine's Day
- 19 President's Day
- G.W. Birthday Parade, Alexandria, VA
- 21 Ash Wednesday
- 22 Washington's Birthday

March

- 9 St. Patrick's Day Parade, Alexandria, VA
- 17 St. Patrick's
- St. Patrick's Day Parade, Washington, D.C.
- 20 Spring begins
- 23 Boy Scout Half Marathon, Washington, D.C.
- 31 Palm Sunday

April

- 1 April Fools Day
- 5 Good Friday
- 7 Daylight Savings
- Easter
- 13 Cherry Blossom Parade, Washington, D.C.
- 14 The MS Walk, Reston, Pentagon, Potomac

May

- 12 Mother's Day
- 18 Armed Forces Day
- MS 150 K Bike Tour, Virginia
- 27 Memorial Day (Observed)

June

- 14 Flag Day
- 16 Father's Day
- 20 Summer begins
- 21 Bike America Tour, Virginia
- 29 ARRL Field Day

July

- 1 Dominion Day (Canada)
- 4 Independence Day
- Fourth of July Celebration, Washington, D.C.

September

- 2 Labor Day
- 22 Autumn begins

October

- 14 Columbus Day (Observed)
- 27 Daylight Savings
- 31 Halloween

November

- 11 Veterans Day
- 28 Thanksgiving

July

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October

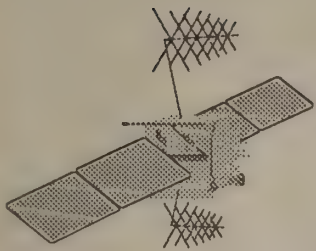
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Spartan Packet Radio Experiment (SPRE)

Wasn't the SAREX activity on space shuttle mission STS-74 in November exciting enough? Well, until the next time SAREX flies again, on STS-76 in March, here is something new! SPRE is scheduled to fly this month on the very next space shuttle flight. Here is information about SPRE from Ken McCaughey, N3FZX, SPRE Project Lead, from his file SPRE02PR.TXT dated November 29. Watch for additional bulletins close to STS-72 launch and during the mission. - WD8LAQ.

The Spartan Packet Radio Experiment (SPRE) is an Amateur Radio (HAM radio) communications experiment. The primary mission is to test satellite tracking using amateur packet radio and a Global Positioning System (GPS). SPRE was developed and built by the University of Maryland Amateur Radio Association (UMARA) with assistance from NASA, volunteer engineers, and volunteer software professionals.

SPRE is one of four experiments on NASA's Spartan/OAST-Flyer spacecraft. The Spartan spacecraft is scheduled for launch on January 11, 1996 aboard the space shuttle Endeavour as part of mission STS-72. The spacecraft is a cube shaped, battery powered, retrievable satellite. Spartan will be deployed by the shuttle's robot arm and likewise retrieved after approximately 48 hours of free flight.

Mission Objectives:

- * Promote amateur radio and amateur satellite communications.

- * Test GPS and packet radio based tracking system using a Low Earth Orbit (LEO) satellite.

- * Provide an educational tool to inspire elementary and high school students to pursue science and engineering.

- * Provide a unique hands-on educational opportunity for college students.

SPRE is designed to relay ground station positions and transmit telemetry containing the GPS location of the spacecraft and housekeeping data. The GPS data is generated by another Spartan experiment.

Special software called APRtrak (tm) will be used at SPRE ground stations to plot the positions of stations and objects world-wide using SPRE transmissions. APRtrak uses full color maps and graphics with the capability to display detail maps of selected geographic regions.

Amateur radio ground stations can transmit their locations to SPRE, and if heard, SPRE will relay GPS information back to Earth. All ground stations within range of SPRE will see the relayed stations plotted at the on the map at the correct geographic location. The APRtrak software will also decode and display SPRE housekeeping telemetry including temperatures, voltages, and system status. This software is freely available on the Internet for installation on IBM compatible computers.

This technology has many applications in the amateur radio as well as the commercial worlds. Low cost Low Earth Orbit (LEO) satellites could be used to track storms, weather balloons, boats at sea, trucks, etc. Satellites could collect the location data from ground targets and download it to ground control stations. If the SPRE mission is successful, this capability may be incorporated into future amateur spacecraft, thus supporting the amateur's effort for technological improvement.

Continued next page

The operational aspects of SPRE will include amateur radio operators throughout the world. Elementary and High Schools are encouraged to enlist the aid of local amateur radio operators to set up ground stations and participate in the SPRE experiment. SPRE can be used as an educational tool in many classes including math, science, and geography.

SPRE can still be used as an educational tool even if a school is not in session during a fly-over. A simple amateur packet radio station can be configured to listen to the SPRE telemetry and record the data for later study.

Amateurs and schools who participate are encouraged to send the data they collect to the SPRE Project to help to piece together a composite picture of the mission. The final results will be made available to participating schools and the amateur radio community.

SPRE will use a ground control network, SPREnet, consisting of specially equipped amateur radio stations to distribute data via the Internet. These control stations will monitor the health and activity of SPRE.

In addition to the amateur radio experiment, the SPRE system will forward to Earth a sampling of real-time telemetry for two of OAST Flyer's experiments: REFLEX and GADACS. Spartan is equipped with on-board recorders to capture data from each of the experiments. Traditionally, an experimenter must wait several weeks to receive the mission data. SPRE provides a low cost, innovative solution giving experimenters the opportunity view a small sample of data during the mission while advancing amateur radio satellite technology.

The sample REFLEX data from the mass spectrometer will be used by the experimenters to provide feedback on how well their experiment is performing. SPRE will be providing GPS location and time information from the GADACS experiment. This information will provide some

insight on the health of the GADACS GPS receivers as well as indicate the current location of the Spartan satellite. Using the APRtrak software described above, amateur radio stations and schools will be able to observe the track of the satellite as it passes overhead.

Data is transmitted on a downlink frequency of 145.55 MHz. This is the same frequency used by the MIR space station and the Shuttle Amateur Radio EXperiment (SAREX). The data format is completely printable ASCII characters and therefore is fully compatible with all amateur packet radio equipment in common use today.

All of the hardware and software has been designed and constructed by students and volunteers. This low cost project has provided a great hands-on opportunity to gain experience in space communications. So far, several students have earned college credit for their work on SPRE. It has also helped some graduating students secure employment in the aerospace industry.

Information Summary

Mission: STS-72, Space Shuttle Endeavour (OV-105)
Launch: January 11, 1996 at 09:18 UTC (60 minute launch window)
Orbit: 28.45 Degrees
SPRE Deployment: 3 days 2 hours mission elapsed time
SPRE mission: Approximately 46 hours
Operating Mode: FM, AFSK 1200 baud packet
Frequencies: 145.550 MHz Simplex
Landing: January 20, 1996 at 04:54 UTC at KSC
WWW: <http://w3eax.umd.edu>
Anon. FTP site: [w3eax.umd.edu/pub/spre](ftp://w3eax.umd.edu/pub/spre) directory

Ground Stations:

- * Any amateur radio station or school with packet radio capability
- * ARPtrak Software (available on the Internet)
 - Runs on an IBM compatible PC

Continued on page 21

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Amateur Radio Training

John Forrest WZ4A
6111 Burnett St., Alexandria, VA 22310
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703)644-3920
Anne Arundel RC	Tony Young WA3YLO	(301)262-1917
Arlington ARC	Fred Bardsley WD4DHW	(703)533-0372
Antietam Radio Assn.	Robert Long KD3JK	(301)824-5132
Baltimore RATS	Joe Chidester W3SHZ	(410)602-0353
Baltimore ARC	Essex Community College	(410)780-6854
Fauquier ARC	Neil Spokes AB4YK	(703)364-3861
Frederick ARC	Hal Silverman W3HWC	(301)831-7946
Herndon Rep't Gp	Michael Weber WB8RDN	(703)450-2304
Laurel ARC	Pud Reaver W3DQI	(301)498-6293
Madras	Larry Ziecheck	(301)984-6113
MD Mobileers ARC	John Baugus N3JME	(301)551-3161
Montgomery ARC	Rocky Jones KC4UXO	(301)216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703)971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301)249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703)361-3091
Pentagon ARC	David Boyd K9MX	(703)659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301)862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(703)722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301)888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410)586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(703)659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703)430-4149
Tri-County ARC	John Creel WB3GXW	(703)572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703)560-2779
Woodbridge Wireless	Jim Duffey WD4AIR	(703)491-3170

Class Announcements

GENERAL/ADVANCED CLASS: The Mount Vernon Amateur Radio Club and the First Christian Church (Alexandria) Boy Scout Explorer Post will present an upgrade amateur radio training course for the General Class license. If sufficient interest is expressed, the course will be extended to include training for the Advanced Class license. Morse code instruction will be included. The class will be held in the City of Alexandria beginning in mid-January 1996. There is no charge for the class; however, students will be required to provide their own ARRL license manuals and possibly other materials which will be provided at nominal cost. For information, contact John Forrest, WZ4A at (703)971-3905 or Bill Schmitt, KD4CNS at (703)960-9301.

TECH+/GENERAL CLASS: An upgrade class will be held for Tech-plus and No-Code Tech's who want to upgrade to General Class. Starting on Monday, January 8th, and running for the next 12 consecutive weeks. The class will consist of both theory and code training, from 0 to 13 wpm speed. Classes will be held at the Historical Electronics Museum in Linthicum. The time of the class will be from 7 to 9 pm. If it appears that we need to run a few weeks past the 12, that can be arranged. All of you no-code Techs and novices who have been wanting to upgrade, this is your opportunity! So make your New Year's resolution to upgrade now and sign up! Class size is limited! To enroll, contact Bruce, AA3KR, on the 146.805 repeater, or call 410-437-1891.

SPRE, from page 18

- Displays SPRE telemetry
- Unattended data collection capability
- Can replay satellite passes

- * Simple packet radio station setup
 - Licensed Amateur Radio Operator
 - Terminal Node Controller (TNC)
 - VHF Radio (amplifier recommended if transmitting to SPRE)
 - VHF Antenna (beam recommended if transmitting to SPRE)
 - PC Compatible Computer
 - APRtrak Software Package4
 - Satellite Tracking Software (Recommended)

To Participate:

Schools wishing to participate should contact the SPRE Project for more information and the

APRtrak software. Send electronic mail (e-mail) to Ken McCaughey at kenneth@w3eax.umd.edu. Or send a self addressed stamped envelop and a 3.5 inch high density floppy disk to:

Attn: SPRE Project
Century Computing Inc.
8101 Sandy Spring Road
Laurel, MD 20707

For information on local amateur radio clubs, operators, and volunteer instructors please contact Peter Budnik from the Amateur Radio Relay League (ARRL). Send mail or e-mail to:

Peter Budnik

ARRL

225 Main Street Newington, CT 06111

e-mail: pbudnik@arrl.org



Volunteer Examiner Cooperative

JOHN FORREST WZ4A
6111 Burnett St.
Alexandria, VA, 22310
(703) 971-3905

* Effective July 1, 1995, the Advanced Class written exam question pool (Element 4A) changed. Since the question pool has not been changed for many years, significant changes are anticipated. Be sure to use study materials appropriate for the current question pool.

* ATTENTION VE's: It's time to plan your 1996 test dates. 1996 dates will appear in *AutoCall* soon. Also, copies of the 1996 *AutoCall* exam schedule will be distributed to local ham radio stores around the middle of December. Please send your information to WZ4A as soon as possible."

1996 Schedule of Examinations

January 7 (Sunday)	Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day)(301)773-2898 (Evening)
	Elkins, WV - (Mountain ARC VEC) Walk-In Contact: Walter Corley KF8SX (304)637-0506
January 13 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey N4GUS (703)455-1510
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
	Baltimore, MD - Moose ARC (ARRL VEC) Walk-In Contact: (410)889-5214
January 20 (Saturday)	Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6

January 26 (Friday)	Stafford, VA - Stafford ARA (ARRL VEC) Walk-In/Pre-Registration requirements unknown Contact: Jim McCloud N4LZJ (540)786-8012
January 28 (Sunday)	Odenton, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Jerry Gavin NU3D (410)761-1423
February 4 (Sunday)	Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
February 10 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey N4GUS (703)455-1510
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
	Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
February 15 (Thursday)	Towson, MD - Baltimore ARC (ARRL VEC) Pre-Registration/Walk-In Requirements Unknown Contact: HAM-TALK (410)426-8255
February 17 (Saturday)	Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
February 26 (Monday)	Annapolis, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Lois Turner KA3VVQ (410)647-4178

**March
3
(Sunday)**

Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In, Contact:
Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)

Elkins, WV (Mountain ARC VEC) Walk-In
Contact: Walter Corley KF8SX (304)637-0506

**March
9
(Saturday)**

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank
Mackey N4GUS (703)455-1510

Baltimore, MD - Moose ARC (ARRL VEC) Walk-In
Contact: (410)889-5214

Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In
Contact: Bob Israel WC3I (301)262-5083

**March
16
(Saturday)**

Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable,
Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6

**March
26
(Tuesday)**

Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Limited Walk-In
Contact: Jerry Gavin NU3D (410)761-1423

**March
29
(Friday)**

Stafford, VA - Stafford ARA (ARRL VEC) Walk-In/Pre-Reg.
requirements unknown Contact: Jim McCloud N4LZJ (540)786-8012

**April
7
(Sunday)**

Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In
Contact: Freddie Battle NG3G (202)546-9348 (Day)
(301)773-2898 (Evening)

Don't forget to bring your license when upgrading!!



Volunteer Examiner Cooperative

EXAM FEES:

- * Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
- * ARRL VEC exams cost \$5.90
- * Laurel VEC exams are free
- * Mountain VEC exams are free
- * W5YI VEC exams cost \$5.90

BRING TO EXAM:

- * Picture identification
- * Completed FCC form 610 (most VE teams will supply at exam)
- * Original and a copy of current FCC amateur radio license
- * Originals and copies of all active certificates of successful completion of prior exams
- * Exam fee (check or cash depending on VE team)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

- * If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team. It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., January 25 for March issue)

Ham of the year

☆☆☆ W. Page Pyne, WA3EOP ☆☆☆

Each year in which there are multiple nominations, the Foundation usually selects one of them as HAM OF THE YEAR. This year the 1st nomination was received in October but could not appear until now. Winners can take pride in being the "best of the best". Urge your club leadership to nominate deserving candidates for Ham Of the Month.

- Tony Young ,WA3YLO, FAR Vice President

Page became a ham as a novice in 1965. Since then, he has graduated through the amateur radio ranks by holding Technician, Advanced and finally Amateur Extra Class licenses. He has been a member of the Antietam Radio Association (ARA) for over 30 years and has held the offices of Vice-President, Secretary, Treasurer and Activities Chairman.

Page graduated from Hagerstown (MD) junior College in 1967 and continued his education at the University of Maryland in College Park, MD and the Capitol Radio Institute in Washington, DC.

Among his accomplishments, Page was responsible for encouraging the Antietam Radio Association and the Opequeon Radio Club to join the Foundation for Amateur Radio, serves as their FAR Trustee, helped to organize the Antietam Radio Association's recognition of Hiram Percy Maxim's (W1AW) 100th birthday celebration in 1969 and Maxim's 125th birthday celebration in 1994. He is also co-founder and vice-president of the Itchycoo Park VHF Amateur Radio Society (WA3NUL) and co-founded the now defunct

Washington County Civil Defense Emergency Rescue ARC (WA3JMR).

Page has always been an amateur radio "spark plug". Year after year, he has participated in VHF contests, ARA Field Day activities (W3CWC), training courses, VE testing and local public events such as the annual Alsatia Mummers Parade, the JFK Runs, Hagerstown Junior College Triathlon, and Hagerstown (MD) air shows.

For the past few years, Page has co-chaired the annual Maryland-DC QSO Party, been a prime helper at the Great Hagerstown (MD) Hamfest and has set up Special Event Stations marking "Fresh-Water" Islands on the air at Pee-Wee Island, PA and Chincoteague Island, VA.

Page serves as an ARRL Official Bulletin Station and keeps Antietam Radio Association members up to date on news of interest and concern.

- Nominated by Ted Lawhead Jr., WA3AAT

HAM OF THE MONTH: Submit your nominations to committee chairman Tony Young, WA3YLO, 12016 Long Ridge Lane, Bowie, MD 20715. See the Sep. or Oct. 95 issue of *Auto Call* for criteria.



1996 WINTER HAMFEST
Sponsored by the
Harrisburg Radio Amateurs
Club



SATURDAY, JANUARY 13, 1996
Oberlin Fire Company
Oberlin, PA

(Harrisburg Area-4 miles from PA Turnpike exit # 19)

Directions: I-283 to "Swatara" - Exit #1, to Hwy 441. (I-283 North, turn left onto Hwy 441: I-283 South turn right onto Hwy 441.) Go to traffic light and turn left, following Hwy 441, onto Eisenhower Blvd. Go to traffic light and turn right, following Hwy 441 to stop sign. Turn right at stop sign, following Hwy 441-Harrisburg Street. Fire Company is 0.2 miles on right hand side.

ADMISSION: \$2.00 Donation; TABLES: \$8.00 each;
TAILGATING: \$1.00/space.

Talk-in: 146.160/146.760 MHz, W3UU

Excellent In-door facilities and food!

Dealer Setup 6:00 a.m.; Admission 8:00 a.m.

Table reservations to: Tom Hale, WU3X, P. O. Box 418, Halifax,
PA 17032. Information: (717) 232-6087.

Call early! Our tables sell out fast!

Hamfest/Computers/Food/Fellowship

Advanced Announcement: Annual Fire Cracker Hamfest,
Thursday, July 4th, 1996! Seibert-Emrick Park, Bressler. Call,
now, for table reservations! (717) 232-6087.

Vienna Wireless Society

20th Annual and ARRL Sanctioned

WINTERFEST[®] WINTERFEST

Vienna Community Center

Sunday, February 25th, 1996

Frostbite Tailgate Open 6:00 am, First Come Basis

Indoor Area Open 7:30 am



Admission \$5.00 - XYL Free

Tailgate Space \$10.00 Incl.

DXCC Field Checks

Prize Drawings Hourly
9 am - 3 pm

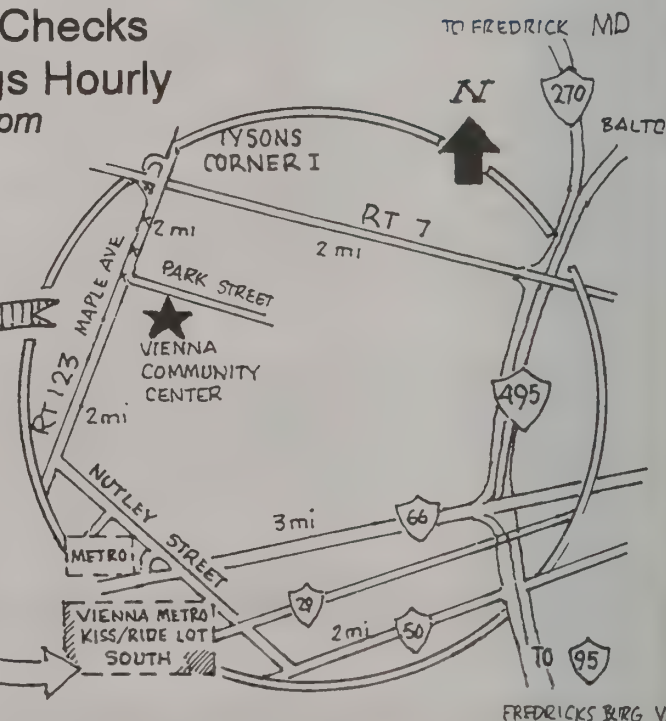
Info: Paul, AB4CY (703) 560-2779

Parking Regulations Enforced

LIMITED PARKING

Park Free at Vienna Metro
South Kiss & Ride

Free Bus to/from WINTERFEST
7:30 am - 2:30 pm



NOTE !!! - Day Before:

VEC Exams -- Same Place

Saturday -- 9 am

TALK-IN: 146.31 in/146.91 out

K4HTA/R 146.085 in/146.685 out

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Outside the State of Maryland, Dial 1-800-HAM-FEST (1-800-426-3378)

ANNOUNCING

THE 1996

B.A.R.C. "IT'S FREE" MINI-FEST

WEDNESDAY, JANUARY 24th
MARYLAND STATE FAIRGROUNDS
EXHIBITION HALL
TIMONIUM, MARYLAND
ADMISSION IS FREE! - TABLES ARE FREE!
FOR THE ENJOYMENT OF THE AMATEUR COMMUNITY

SPONSORED BY:
THE BALTIMORE AMATEUR RADIO CLUB, INC.
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OUR ANNUAL MID-WINTER INDOOR
AMATEUR RADIO AND ELECTRONIC
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CLEAN UP YOUR TRASH
THAT'S ALL THERE IS TO IT!

FOR MORE INFORMATION: DON'T WRITE,
JUST DIAL: 410-HAM-FEST



Alexandria Radio Club

Meetings: Second Friday of each month, 8:00 PM at the American Red Cross Bldg., 123 N. Alfred St., Alexandria, VA.

Club Station: W4HFH.

Repeaters: 147.315+, 444.600+ (Tone: 107.2)(Cross linked/2MTR), 53.13, 224.82 (Cross linked W/6MTRS), 919.6, 1282.6.

Nets: Every Thursday evening at 8:00 PM, 147.315/444.6.

Information: Harry Jones, N4CW, (703) 790-9613.

The Alexandria Radio Club meetings have been moved from the Alexandria Red Cross to the Alexandria Red Cross. Actually the Red Cross chapter moved to a new building at 123 North Alfred Street, Alexandria and we moved with them. The new facility has much more space for the Red Cross and we have a dedicated space for the Club Station/Equipment. Over the next few weeks/months we will be installing new coax and antennas and generally outfitting our new area.

The club will be providing communications assistance for the "First Night" celebration on New Year's Eve for the City of Alexandria. We will be setting up a net control station in a store front at Peele Travel in the 1100 block of King Street. We will have a Ham Radio Display and take message traffic for entry into traffic nets. There will be family oriented entertainment and activities at numerous venues along in the King Street and Washington Street area.

The club will be initiating a new ARES training program in the new year to train new hams for involvement ARES activities. Subjects to be considered are Net Control, Skywarn, Packet/APRS, and Incident Command/START Triage. Training subject topics and support would be appreciated.

Look forward to seeing you at the Jan meeting, 12 Jan 96 at 8:00 PM, 123 N. Alfred Street, Alexandria, Va.

73, Harry



AARC

Anne Arundel Radio Club

Meetings: First and Third Thursday of the month at 8 p.m. at the Davidsonville Family Recreation Center, Queen Anne Bridge and Wayson Roads off Maryland Route 214 near Annapolis.

Mailing Address: P.O. Box 308, Davidsonville, MD 21035

On The Air: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. Wednesdays at 2000 on 444.400. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz.

Information: Margaret (Holly) Bevan, 410-923-0229.

At the October 19th program meeting, Club Member Jerry Herman/N3BDW gave a very enlightening talk on the unusually busy hurricane season we are having this year. He discussed the five indicators used to predict hurricanes; the rainfall in the northwestern corner of Africa, the overall barometric pressure, the sea surface temperatures, the direction and strength of the upper level winds and the activity of El Nino. He also explained how the hurricanes get their names. The names are selected by the WMO (World Meteorological Organization), a part of the United Nations, from lists submitted by the countries affected by the storms. Jerry is very active as a net-controller for the Hurricane Net.

On November 16th Club Member Michael Martin/N3RWF gave an interesting and informative talk on his work as an interference investigator for a power company.

On October 8th about a dozen AARC members, coordinated by Jerry Hazell/N3HKJ furnished communications for the Annapolis Striders' 16-mile race in south county. Then on October 28th and 29th, approximately 25 volunteers, coordinated by Bob Baltz/N3MNT, worked at the Chesapeake Appreciation Days at Sandy Point State Park. In addition to the communications, they manned an Anne Arundel Radio tent to demonstrate CW and to send messages from the public to various places around the country.

At the clubhouse on October 14th, Oscar Ramsey/NV3G, Charlie Tiemeyer/W3RMD and Holly Bevan/N3BMB gave 19 tests to 10 persons. Ten tests were passed with 6 upgrades. Other members of the team were: Harlan Ray, III/AA3FE, Bob Baltz/N3MNT, Robert Kammer/N3POX, Bettye Tiemeyer/K3VRZ and Bob McCown/N3IYI. On November 11th Oscar Ramsey, Robert Kammer/N3POX and Bob Baltz/N3MNT gave 11 tests to 6 persons. Seven tests were passed with 4 upgrades. Other members of the team were: Harlan Ray III/AA3FE, Mike Bevan/WA3NAK, Bob McCown/N3IYI and Holly Bevan/N3BMB. The next testing session at the clubhouse will be on January 13, 1996. Congratulations to Owen Lowe/N3NYZ who upgraded to Advanced in November.

73, Holly/N3BMB



Antietam Radio Association

Meetings: First and Third Tuesday of the month at 8 p.m. in the Conference Room at the Washington County Regional Airport, Showalter Road, Hagerstown, Maryland.

Mailing Address: P.O. Box 52, Hagerstown, MD. 21741

Nets: Tuesday 7 p.m. 146.940 MHz.; Wednesday 7 p.m. 447.975 MHz.; Thursday 7 p.m. 147.090 MHz.

Repeaters: 147.09+ and 146.94 -.

Information: Donnie Sue Mulligan/
KB3AOO (301) 582-2984

The ARA (and others) communicated via amateur radio for the 33rd Annual John F. Kennedy 50-Mile Ultramarathon, the oldest in America, on November 18, 1995.

There were Al/N3NVT and Bob/KD3JK (the ones that got all of us together) and Al's daughter Hannah being on the sight all day. Page/WA3EOP working Net Control with help from John/N3TDN, Jim/KD30, John/N3TGU.

Fred/N3HTN and Don/KD3TY helped with the repeaters and monitored. Also, there were Phil/KE3FL, Dave/ N3EAZ from REACT, Stan/W3YGC the SWEEP, Charlie/NF3X rode around with Mike Spinnler (Race Co-ordinator), Bob/K5ME, Jim/N3PMP, Jack/W3NHR, Ted/WA3AAT, Gene/N3MZB, Jeff/N3PMN and daughter Michelle, Joe/K3LLP, Don/WB3FTQ, Carl/N3LER, Larry/ N3QBK, Lauren/N3RTJ, Carlo/K3ABH, Jamie/N300E, Steve/N4TMS, Russ/N3KKW, Charlie/N3MVR, Donnie/KB3AOO.

THANK YOU, EVERYONE. If I've missed anyone, please forgive and tell me.

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About 570 runners started out from Boonsboro Middle School at 7 a.m. The runners had to crawl through and/or dodge fallen trees along the snow-covered Appalachian Trail on South Mountain to Weverton Cliffs, about 12 miles, where they descended to a muddy Chesapeake & Ohio Canal towpath, and then the last 8.3 miles on paved roads to Springfield Middle School in Williamsport.

There were 485 runners that crossed the finish line. Eric Clifton won the race in 6 hours, 15 minutes and 35 seconds, a bit more than last year; Courtney Campbell was second-place; Harvey Hall was third-place. Janice Anderson was the first woman to cross the finish line and came in 20th overall.

Our Club Elections for 1996 on November 21st were very close...Bill Harclerode as President, Bob Long as Vice President, Amanda Daywalt as Secretary, Larry Belella as Treasurer, Gary Swales as Activities Manager, and the three Directors are Ted Lawhead, Ray Mongrain, and Jim Dula.

CONGRATULATIONS to Page Pyne/WA3EOP, the HAM OF THE YEAR!!! No one could have picked anyone better qualified or deserving than he. Page is a member of ARA and one we look up to.

Have a HAPPY NEW YEAR...

73, Donnie Sue/KB3AOO



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Baltimore Amateur Radio Club

Meetings: Meetings: Twice monthly, 7:30 pm at Dulaney High School, Padonia Road, Timonium, Md.. -First Wednesday of the month -business meeting, Third Wednesday of the month - program.

Repeaters: W3FT/RPTR 146.67(-), 224.24 (-) (no PL) and 449.625(-)(PL 107.2) Note: two meter/220 Mhz. repeaters are linked.

Club Net: Every Tuesday night at 8:30 pm on 146.67/224.24.

NTS Net: Daily at 6:30 pm on 146.670/224.240

Club BBS: (410) 665-7646 (min. 2400 baud)

Club Voice Mail/Info: (410) HAMTALK

Hamfests: Greater Baltimore Hamboree & Computerfest/Maryland State ARRL Convention information: (410) HAM-FEST or (800) HAM-FEST.

Mailing: BARC, Inc., P.O. BOX 120, Reisterstown MD 21136

Happy New Year to you all, and we at BARC hope that it will be a good year for everyone.

Users of our club bulletin board system should note that its number has changed. It is now (410) 252-6238. Ron, N3EKO, tended the BBS for quite a while and has had to turn it over to Nelson, W3BGX, which means it had to move, hence the change in phone number. Many thanks to Ron for his service as BBS sysop, and thanks to Nelson to taking on the job.

BARC is still running hidden transmitter hunts at least once a month. Again, there is no regular schedule, so be sure to check the club's voice mail system for details. The last few hunts that the club has run have been cooperative in nature. Our huntmaster, Chuck, K3FT, has been playing the fox while the hunters have been encouraged to share their information. Chuck's goal in this is to

Continued next page

foster the skills needed to perform tasks such as tracking down a malicious interferer or finding a downed aircraft by homing in on its beacon. If you would like to join in, all you have to do is tune in to the club's 146.670 MHz repeater on the designated Sunday in the early afternoon, hop in your car, and be sure to bring along your 2-meter H-T and its rubber duck.

At our second, or program, meeting on 15 November we were treated to a presentation on the AMSAT Phase 3D satellite program, given by Howard Ziserman, W3GOV. He went into some detail about how lessons learned from previous OSCARs are being incorporated into the design and construction of the new Phase 3D satellite, and how it will be much easier to work than earlier satellites on account of its improved antennae, receivers, and more powerful transmitters. No longer will it be necessary to use long Yagis, because the improvements will allow lower-power stations to work the satellite with simple antennae, even omni-directionals!

In our club newsletter, The Modulator, there is an article by Chuck, K3FT, on the support given by local hams to the civil authorities during the visit of Pope John Paul II to Baltimore on 8 October. Chuck reports that all went well from the ham radio viewpoint, with Murphy inflicting only minor annoyances on the operation, and with amateur radio succeeding sometimes where the official channels were clogged and sluggish. Chuck wrote that there were times when the hams at various control centers had important information in hand before the official operators did, which impressed various officials immensely. Chuck thanks Terry, WA3DZZ, for careful planning and organization, and congratulations go out to all the hams who helped out. Thanks for showing officialdom that we are a valuable resource.

Lastly, I have an announcement about our January meetings. Usually, our second meeting in January is canceled in favor of our "It's Free!" mini-hamfest in the Exhibition Hall at the Timonium Fairgrounds. This year, the mini-fest is

on the FOURTH Wednesday in January (24 January) at 5:00 pm. So, we will have a program meeting in January, after all, so please join us for a program titled, "Spread Spectrum Revisited, How It Works and its Theory of Operation", given by our own Bruce Packham, W3UWV.

... 73 de N3NYC/Hale



Central Maryland Amateur Radio Club

Meetings: 4th Friday of the month at 7:30pm, at the New Carrollton Municipal Center, 6016 Princess Garden Parkway, New Carrollton, MD (no meeting in December).

Repeater: N3EZD/R 145.230 MHz

Net: Every Tuesday, 9:30pm, 145.230 MHz repeater.

Mailing Address: Central Maryland Amateur Radio Club, 6016 Princess Garden Parkway, New Carrollton, MD 20784.

Information: Oscar Ramsey, Pres - NV3G, (301) 262-3392.

CMARC's award winning Greenbelt Labor Day Festival food booth is featured in the December issue of QST! Check out the picture in the news feature section.

Testing was held on November 17th for students attending CMARC's Amateur Radio Training class. One student earned a Novice license, another a No-Code Technician license, and yet another upgraded to Technician Plus. Several others passed the Novice written exam element. Technician theory is scheduled to be taught the rest of November and into December culminating in another testing session on December 15th. We hope that all of those who passed their Novice written exam November 17th will become (at least) No-Code Technicians December 15th.

CMARC held its November meeting on November 24th in a conference room at Doctor's Hospital, Lanham, MD. We are considering

moving our regular meeting location from the New Carrollton Municipal Center to Doctor's Hospital. Please check with Oscar/NV3G, or check into the Tuesday evening net to confirm the location of CMARC's January meeting.

CMARC's annual Christmas party was held on Saturday, December 9th at Three Brothers Pizza on Kenilworth Avenue. Tony/N3JWT, the famous Chinese auctioneer, operated and snooped yet another exciting Chinese auction gift exchange.

73 Jim/KD3JA



Columbia Amateur Radio Association

Meeting: 4th Tuesday of the month at 7:30 p.m., at the Kiwanis Building at the Kiwanis/Wallace Park off of Rte. 144, Ellicott City.

Net: 147.135 repeater at 8:30 p.m. each Tuesday except for meeting nights.

Youth net: 147.135 repeater at 7:30 p.m. every Thursday.

Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.

Information: Larry Russo, Pres - K3TFU, (301)725-2840.

Mailing: P.O. Box 911, Columbia, MD 21044

CARA elected its new officers at the November meeting. The following slate of officers will be installed at our January 1996 banquet:

Pres. - Larry Russo - K3TFU
VP - John Pinkston - W3GJN
Secy - Dan Goulette - N3LDC
Treas. - Joe Massi - KB2JG
Mbr-at-Large - Jeff Seymour - N3PPK

Our January banquet will take place on January 20, 1996, at the Bethany Lane Methodist Church.

CARA will provide the meats, breads, and drinks. Members will provide salads, vegetable side dishes, desserts, etc. For further information, call Joy-KE3MP at (410)992-8209, or Dionne-KA3ZDL at (410)5312933.

73's, Jean Williams-KB3AOT



Fauquier Amateur Radio Association

Meeting: 7:30 p.m., Second Tuesday of the month except July, August and December. Shadow Lawn Recreation Center, Warrenton VA. Next meeting January 9, 1996.

Breakfast: Last Saturday of the month at Western Sizzlin Warrenton VA 7:30 - 9:00 a.m.

Net: Every Wednesday, 9:00 p.m., 147.165 Mhz NZ4N Repeater.

Packet: KE4YVU FARA7 node 145.070 Mhz with direct connect to FBBS9

FBBS9 Bulletin Board 145.090 Mhz,
FARA9 node 145.090 Mhz.

Repeater: NZ4N/R 147.165 Mhz (+0.600 Mhz)

Newsletter: TOROID, Monthly.

Information: Don, WY2V, (703)347-5745.

Next Meeting: Dec 9th. Holiday Party - location to be announced.

HAPPY NEW YEAR!!

The January meeting will focus on forming the direction of the club for the coming year. Goals currently include:

- * Maintaining the voice repeater with phone patch
- * Enhancing the digital system (currently capable of VHF, UHF, HF, Satellite Packet and Internet access) with even greater storage of on-line data bases
- * Reviving classes
- * Expansion of testing sessions

The club's 1995 Field day standing, 105th of 635 for Class 2A competitors, will be tough to beat in 1996 but this will also be a topic for discussion. So bring your ideas and help make 1996 the kind of Ham year you'd like it to be.

Congratulations to the new club officers! The new president is Larry Walker, K4LLQ. Vice President is Mark Lindsey, KD6AKC. Treasurer is George Murphy WD4KOJ and Secretary is John (Woodie) Woodward KC6NOT. Many thanks to the outgoing officer (Don WY2V) for his service through the year.

The Christmas party was 9 Dec at the Marshall United Methodist Church. The goodies and good times were enjoyed by all. There was no regular club meeting in December.

The club is looking for a single speed CDROM for the Packet BBS. This would be used for more on-line data bases. Cost should be in the \$20 range and donations would be appreciated.

73, Mark, KD6AKC



Green Mountain Repeater Association

Meetings: Board of Directors, Last Monday of each month.

Repeaters: KD3VR-146.61 (Cheverly), K3GXF-146.88 (Greenbelt).

Luncheon: First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, US Route 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM.

Mailing: GMRA, P.O. Box 429, Riverdale, MD 20737

Information: Boyd Nelson - KZ3Z (301) 434-0934

GMRA had a good turnout for the monthly luncheon social on November 4th, 1995, at the Laurel Center Shopping Mall. There were 24

including members relatives and guests.

The Annual Luncheon Meeting will be held on December 9th, 1995, at The Old Country Buffet in Laurel. The location is on Route 198 and at the intersection of Route 197 across from Hechingers. We are expecting a great turnout.

Recently, Joseph P. Nunemaker II, KD3VR, President of GMRA sent out a letter to all members. This letter not only summed up what took place, concerning repeater functions and upkeep for the past year but also expressed thanks to the many members. There were those that donated equipment and helped for sales at the Hamfests and also members who helped with repairs at the Repeater sites.

Enclosed with the President's letter was an application for dues renewal or for new membership. At the time Joe's letter was printed GMRA boasted 203 members and is still growing. Let's all hope this will be a banner year. At this time it is only proper to wish everyone a Happy and Healthy New Year.

73s from Ken Easton N3HLY



Historical Electronics Museum Amateur Radio Club

Meetings: Third Wednesday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and Elkridge Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

Net: Monday 8:00 PM, 146.67(-)/224.24(-) MHz (courtesy of BARC).

Information: Ernie Farkas K3CBW - (410) 747-1377.

Mail: P.O. Box 746, Mail Stop 4015, Baltimore, MD 21090.

Street address: 1745 W. Nursery Rd., Linthicum, MD 21090

The November 15, 1995 meeting was well attended with several guests from other clubs. Because of its close association with the Museum HEMARC is particularly pleased to have guests from other clubs at any of its meetings.

The current Novice/Technician class progress was reviewed with satisfaction. The recent first test session was quite successful with both written elements and code. On December 12, 1995 the final course Technician and Novice level testing will be administered. Rol Anders, K3RA (The course organizer and main teacher) reported very good attendance and progress. Code instruction was not given for this class and consideration is being given to how this might be handled in the future. The availability of tapes and computer programs for learning CW are now so effective that it may be more practical to make these available to students.

The proposed slate of officers for the 1996 calendar year was announced and requests additional nominations and volunteers from the floor were solicited. All members were requested to consider who would be good candidates and then ask them if they would serve. The final call for nominations will be made at the next meeting and then the active members present will vote. The new officers will be installed at the January meeting.

The draft protocol for the Monday night VHF HEMARC net was discussed, but many members had not seen one of the copies circulated at the last meeting. A copy will be mailed with the meeting notice for next month and it will be discussed at that time. Attendance is increasing on the net and more participants are welcome.

The prime feature of the meeting was the ham shack safety demonstration produced by Heru Wamsley, W3WVV. The presentation is designed to make hams respect the potential danger of the power to which they may be exposed without being afraid of it. As Heru pointed out – it is safer to be careful than anxious. Every club would be well advised to constructively entertain their members with a program on ham electrical safety every few

years or so. A fun part of the meeting was the conversation after the demo with all the fine stories of past ham shack disasters.

At the request of one of the members, a copy of a short history of Dr. Frank Conrad's 8XK and early KDKA radio broadcasting activities was circulated. It was suggested that more information and a cleaned up two page summary be made available at the club station in the public area of the Museum.

A plea was made for all members to respond favorably to the present drive for funds for the Phase 3–D ham satellite by AMSAT, ARRL etc. This remarkable bird will enable much wider participation in ham satellite communications. More bands will be available and the power levels required will enable solid QSO's by relatively modestly equipped stations.

The HAL multimode TNC/RTTY equipment from Dr. J.A. "Hutch" Hutchinson, K3ZVH, (silent key) is now being integrated into the club station. RTTY reception was successfully demonstrated to the Novice/Technician class.

Many thanks to the impressively organized VEC team lead by Herman and Lois Turner, WK3P & KA3VVQ, who conducted the class testing.

HEMARC wishes FAR and its member clubs a FB 1996.

73 de Chip W4PBG

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Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings: 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel Md.

Social: 2nd Wednesday of each month, except December (Call for directions).

Nets: 1st & 3rd & 5th Wednesdays, 8:30pm, on 147.225+, no tone.

Mail: P. O. Box 3039, Laurel, MD 20709-0039

Exams: 3rd Saturday of each month, to pre-register contact: John/WB3GXW (301) 572-5124 after 6 P.M.

Information: Jim/WI3N (301)725-6829 or Pud/W3DQI (301)498-6293.

Did we do it, or was it just a dream? The ARRL November Sweepstakes contest has been one of the highlight operating events for the Laurel club each year. It has given a number of new hams a good introduction to contesting, i.e. being fun and a challenge! Since at the time of this writing the Sweepstakes is still a month away I can only report that the club will be conducting operations from the West Laurel Recreation Facility, and that we're going for the "clean sweep",...to work all ARRL sections during the contest! We hope you join in the fun.

At our October club meeting, Heru Walmsley/W3WV, curator of the Electronics Museum near BWI airport, gave a interesting presentation on ATV. At our next meeting in January (we don't meet in Nov and Dec), we plan to have Bob Bruninga/WA4APR give a talk about GPS (Global Positioning Systems) and demonstrate some software using GPS to locate packet stations. All are invited to come hear this presentation. Jim/WI3N, our President (and program chairman), has been doing an excellent job coming up with some great programs.

The Novice/Tech class which began in September will conclude on 20 Nov with a test

session conducted by the Laurel VE team. Serving as instructors for the class have been Jim/WI3N, Pud/W3DQI, Russ/N3AUQ, Tom/W0ZX and Kevin/W3DAD.

The annual Laurel ARC holiday banquet will be held on 10 December at the Timbuktu restaurant on Dorsey Road. Call Pud/W3DQI at 301-498-6293 for reservations. There will be some special entertainment!

Have a great holiday season....73 de Roger/N3MLJ

We did it! A "Clean Sweep" in the November ARRL Sweepstakes event. As was reported last month, the Laurel ARC operated a station at the West Laurel Recreation facility on 18/19 November and successfully contacted each of the 77 ARRL sections during the contest. Would you believe it, New Hampshire was the last section we worked to get all 77 !!



The Maryland Apple Dumpling Radio Amateur Society, Inc.

Meetings: 2nd and 4th Thursdays - 7:00 P.M.
NBC Building - WKYS Conference Room,
4001 Nebraska Avenue, Washington, DC.

Nets: 1st and 3rd Thursdays at 9:00 P.M. on
145.45 MHz (PL-5A).

Repeaters: 444.100/449.100 MHz (PL-2A),
145.45/144.85 MHz (PL-5A).

WWW Address: <http://mvhsl.mbhs.edu/~fwright/MADRAS.html>

Mailing: P. O. Box 2468, Wheaton, MD 20902

Information: Larry Ziecheck - N3GKZ (301) 984-6113, Jean Blacik N3PLC (301) 984-6113.

A hearty round of applause to Bob Sporn WA3GGO, who was our guest speaker on November 9th. He gave an excellent talk on "Six-Meters and More", plus relating many stories from the 20's and 30's. He has been in ham radio for 60

years and had some wonderful experiences during that time. Many thanks, Bob, for a most interesting evening.

It was good to see one of our long-time members, Hani Raad AA3EI, back in the states for a short period. Hani has been in Korea for four months, working for the company he is employed with. He will be off again, shortly, to another exotic part of the world. Happy traveling, Hani.

MADRAS members are looking forward to all the guest speakers and activities planned for 1996. We are busy making preparations for our ~Special Event~ this spring, plus all the other activities that will take place over the coming year. Busy, busy, busy is the key word, but that's what keeps us young-and alert.

HAPPY NEW YEAR TO ONE AND ALL!!!- Here is hoping that 1996 will be the best year ever for all of you; full of health, happiness and good fortune.

73's . . . Jean N3PLC



Maryland Emergency Phone Net

Meetings: Nightly, 1800 Local, 3920 kHz
Directors: W3DQI, K3ONU, WA1QAA, NF3X (Alternate).
Manager: K3ORW; **Secretary:** WA3YLO;
Treasurer: KC3U
FAR Representatives: KC3ZJ, WA3FYZ

Are we proud, OR WHAT! The Maryland Emergency Phone Net can boast that two of the net members have appeared as Ham of the Month in *Auto Call*, and one was also Ham of the Year. That speaks well of the contributions our members make to their clubs and the ham community.

Pud Reaver, W3DQI, has been our column

editor for several years. MEPN thanks him for the effort and time that the column takes. Pud is another who is there for his club and his neighbors. Thanks Pud!!

About our net.... nearly 100 stations throughout Maryland participate daily in this NTS TRAFFIC NET. We are active in emergency situations and drills and many of our members also wear ARES and RACES hats. If you wish to send a greetings or information message to a friend or relative, check into the net and we will move your message into the network, or even help you construct it. Of course we would like you to visit often and, perhaps, become a regular. We have about 20 stations on the net each day.

The directors and members wish all of the *Auto Call* readers a very happy and healthy new year.

73, Tony/WA3YLO



The Maryland Mobileers Amateur Radio Club

Meetings: First Friday of each month at the AA Co. EOC, Crownsville State Hospital grounds Crownsville, Md.
Repeaters: WA3PJQ - 146.805 & 449.125 both in Millersville, Md.
Social Breakfasts: 15 days (3 Saturdays) after club mtg, at Rick's Cafe in Odenton at 9 AM.
Mailing: MMARC, P.O. Box 935, Severn, Md. 21144
Nets: 2-Meter on 146.805 @20:30 local time every Monday, 10-Meter CW practice net @19:00 local time every Monday.
Information: H. John Kohl, KO4A, (President -elect) 410-757-8148. Bruce G. Colburn, Sr. AA3KR, (PIO) 410-437-1891.

Well, here we go again! Another whole new year to enjoy. By the time this is in print, the Christmas party and holidays will be just fine memories. Our new Officers are chomping at the

bit to take charge and move us forward into another glorious and profitable year. (Dear Board of Officers, there is the public praise I promised you. Please do not put me on any new committees!)

For those unfortunates who have not joined MMARC, allow me to give you a quick run down of what a typical year's activities are:

MMARC Swapfest.. A great way to spend the first half of SuperBowl Sunday. Dayton.....We always send at least ten of us out there to gather the latest news and sample all the food along the way. Field Day..At least three stations, one a Novice. USS Torsk.. We run a special event station from the radio room onboard a WWII submarine. Camping Trip..For the whole family, with emphasis on family, not radios. Cycle Across Maryland..A weeks' worth of hard work, good training, and fun. Club Picnic..Another family event that is always fun at Downs Park. Christmas Party..You gotta go to understand the fun we have! Battle of the Bands.. Great if you like marching music. 4th of July Parade.. Help keep the floats in order and enjoy the parade

Besides these events (and others I probably forgot to mention) MMARC provides monthly testing open to the public, we run classes for new and upgrade licensing, provide an annual science award at the science fair at Old Mill Junior High, and have a lot of active ARES and RACES members.

There is the two-meter and a CW Net on Mondays. We have a two-meter and a 440 repeater and by the time you read this, we will have another 440 repeater (jointly owned and operated with the AARC) 525 feet up on a tower in Annapolis. And one of our younger members is currently setting up an Amateur Radio Station and club at the Glen Burnie High School.

So come on out and join the fun. You can find a lot of us at the Swapfest on January 28th, at the Odenton Firehall. We have some new vendors this year, and the tables went fast, so it should be a good time. Not the biggest, just one of the best.

I'll be in the back room hiding, helping with the talk-in so no one gets lost. I hope to see you there.

73, Bruce, AA3KR



The Mid-Atlantic DX and Repeater Association

Meetings: Second Thursday of each month, 7PM, rotating locations among Hagerstown MD, Frederick MD, Martinsburg WV and Greencastle PA. Next meeting is at Richardson's Restaurant in Hagerstown, MD. on Thursday, January 11, 1996.

Net: Tuesday evenings at 1930 local on 147.06.

On the Air: Tuesdays @ 1930 local on 147.06 RPT.

Repeaters: 147.345 (Martinsburg), 147.06, 224.20 & 448.125 (Frederick).

Mailing: 230 North Potomac St., Suite 2A, Hagerstown MD 21740

Information: Voice BBS 301-416-8447 (info Box 112) LandLine BBS (301) 416-8435

Our Get-Ready-for-Winter list for November had about 15 items on it. A smaller number got done. Thanks to Chris, KF9DJ, the 2M and 220 repeaters got a thorough going over with top quality equipment, operated by a highly qualified technician. We learned that the finals in the 2M machine near Frederick were in danger of failing and we were able to order better replacement parts before that happened. Chris also caught a problem with the 220 duplexers which had not been obvious to us, so trouble was avoided there, too.

Bob, N3TXB, put together a high quality demo of SSTV using PCs and some 220 equipment. Bob is a talented presenter and had the group in the palm of his hand as he moved SSTV stills across the room while also showing the capabilities and limits of different equipment-software combinations. MADRA members and guests at the November meeting in Frederick where these

demonstrations took place were impressed enough that talk of a SSTV net via the 220 repeater has been bouncing around on MADRA frequencies ever since. Bob was ably assisted by Dee, N3VCF.

A strong, wet and (eventually) icy storm in mid-November put a heavy frost and wind load on the 147.06 repeater antenna. Intrepid volunteers Mike, WB8VBW, Chris, N3TIK, and Tim, N3VNG made the trek to the bitterly cold mountain top. Everybody had sense enough not to climb in the wind and icy conditions, but temporary work kept the repeater on duty until the weather eased up. Near the end of the month Jim, WA3FUJ, bounced back from his near-pneumonia illness and completed insulation of the repeater shack near Frederick.

As many of you know, our plans for the 440 repeater in November did not go as we predicted. There was no 440 repeater operating for most of the month. As the month ended, some components had improved in health with good treatment and bench rest. Others remained to be repaired but December was expected to see the 440 machine back on duty.

Bob, N3TXB, worked on our voicemail system and had it running well as November ended. He was involved in a complete software and hardware refit of the computer BBS in the last week. In January, in addition to the dinner meeting on the 11th, Dee, N3VCF will take over as editor of the MADRA club newsletter. If you'd like to join us for the dinner meeting, please sign up with Mike, WB8VBW, on the voicemail or computer BBS. That helps us keep the restaurant up to date on how many hungry Hams will be there at the same time.

73 DE N2CSQ/3



Reminder - all submissions for

AUTO CALL

are due no later than the 1st of the month prior to the month of publication!!



Montgomery Amateur Radio Club

Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Bldg, Montgomery Co. Govt Center, 101 Monroe St, Rockville. Park in underground lot G-2.

Repeaters: 146.955 (-600) & 442.750 (PL 156.7) in Rockville.

Club Net: 2nd 4th and 5th Wednesdays of each month at 7 p.m. on the MARC repeater and 7:30 p.m. on 28.450 MHz.

Mail: MARC, P.O. Box 611, Gaithersburg, MD 20884-0611

Information: Jeff - KZ3F (301) 258-0112

Training: Ms. Rocky Jones (301) 216-5210

The end-of-year activities are always busy for the MARC Club as we prepare for the 1996 calendar year. Because of the 300+ members within the club, our President Al Rabassa-NW2M, asked for some extra help in 1996. The club agreed and amended the club's constitution to add three more Directors seats, totaling six.

Ken Nichols-KD3VK, Nominations Chairman, did an outstanding job in filling all ten ballot positions. The results for Officers and Directors for 1996 are:

Officers-

President: Al Rabassa, NW2M,
Vice President: Ron Rubin, N3KQY,
Secretary: Nolan Crabb, AA3GO,
Treasurer: Bob Oakley, WK3C.

Directors-

Gina Becker, N3PPQ,
Ron Palenski, KR4EL,
Jeff Poretsky, N3TOP,
Scott Prentice, KE3UM,
Bruce Shanks, N8XTX,
Claudia Shanks, N8ZOT

I would especially like to thank John Uhrlaub, KA3QFL for serving as club treasurer for the past seven years!

Santa came early this year and brought the club a new 2-meter duplexer for our main transmitter in Rockville. The old duplexer went south and took the high power amplifier with it. The result, we were a QRP repeater for many weeks.

Thanks to the efforts of Scott Prentice-KE3UM, the PA is fixed and the new duplexer was installed the day after Thanksgiving. Coverage is excellent with receiver sensitivity better than we have had in quite a while. Thanks, Scott!

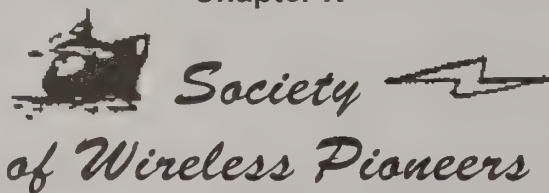
Technical presentation for the next few club meetings will include: AC House Wiring, Bruce-N8XTX; Towers in Montgomery County, Howard-W3CQH; HTML and Internet Home Pages, Al-NW2M; and Hindi Finder DF construction project, Al-NW2M.

And finally, Al-NW2M has reserved a 56 seat luxury passenger bus for the Dayton Hamfest this May. Reserved seating is a must. Cost is \$55 per person. The bus leaves Rockville Friday night, and will give you a full day at the Hamvention Center. Don't miss out!

73 to all, and have a great holiday season.

NW2M

Chapter X



THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

**For Information Call
(703) 536-9537**



Mount Vernon Amateur Radio Club

Meetings: Second Thursday of each month, 7:30 p.m.(except December) Mt.Vernon Governmental Center 2511 Parker's Lane, Alexandria,VA 22308.

Nets: Every Tuesday at 9:00 p.m. Starts on 2 meters then moves to 10 meters on 28.408.

Repeater: WD4PDP 146.055 input / 146.655 output.

Mailing: Mt. Vernon Amateur Radio Club(MVARC) c/o Joe Salemi KR4CZ, P.O.Box 7234,Alexandria, VA 22307.

Information: John KI4HK,(703)780-2882 or Julie KD4WSZ,(703)799-9466 or Packet 145.650 KD4LST-1.

MVARC extends sympathies to the family and friends of Jim, K4DUQ, who became a silent key in November. Though not an official club member, Jim checked in regularly on the Tuesday night net and attended several club functions.

Glenn, W40CC advises that planning continues and some preliminary work has been done for the MARS station site move at the Coast Guard Station in Alexandria. Club members will continue to serve as duty operators until the equipment is shut down for the move to the new building on the base. Several antennas will be refurbished during this period.

Dale, KE4ALX, has completed the training and orientation period for his home MARS station. His callsign is NNNOEWH.

At the November meeting, Mike, KE4ER, presented a view of the USAF MARS program. He discussed the history of MARS dating back to the late 1920's, and explained similarities and differences between USAF MARS and the programs of the other service branches.

John, WZ4A, announced that the Club will be conducting a class to upgrade to General and Advanced, beginning in January. The classes will be held at the First Christian Church, King Street, Alexandria on Wednesdays. In addition to theory, the class will include code training.

The monthly breakfast on the fourth Saturday at Denny's in Hybla Valley has been a success, but is only one of the Club's eating events. Before each meeting on the second Thursday, a group gets together around six PM at the Rib Rack restaurant on Richmond Highway, near the meeting site. On the second Saturday (License Testing Day), some coffee klatchers meet around 7:30 AM at the Roy Rogers at Franconia and Rose Hill Roads for a bite of breakfast. After the test session, some members head out for a lunch at a local restaurant. These events are open to all. Before the November meeting, Vince, KE45KW and Stan, KD4YEP, used their Global Position System receivers to find each other and navigate to the restaurant. The GPS receivers were the subject of an interesting "show and tell" during the meal.

At the November breakfast, Stan, KD4YEP showed his Sprint Personal Communicator. Vince, KE45KW brought in an Optoelectronics Near field receiver/frequency counter, and Frank, AA4ZS passed around a QSL "Fork" forged by blacksmith Chris, KD4IBI.

The 146.655 repeater continues to be bothered with both internal and external problems. In addition to several noise sources near the repeater's location (suspected power line poles), the machine's controller periodically hangs up and prevents the transmitter from shutting down. At the November meeting the Club voted to purchase a new controller in the very near future.

After hearing some reports on the air about antenna and tower damage from several recent storms and high winds, now might be a good time to perform some pre-winter inspection and maintenance, before the roof or tower gets icy.

There will not be a Club meeting on the second Thursday in December (Dec.8). The Christmas Party will be held on December 2 at the Army Material Command building in Alexandria.

Merry Christmas and Happy New Year!!!

73, Chuck, W3HSW



Northern Virginia FM Association

Meetings: Fall, Winter & Spring

Nets: NVFMA Bulletin, Wed, 8 PM, 146.79.
National Capitol ARES, Sun, 9 PM, 146.91.
Equipment Clinic, 1st Wed of the month, 7:30 PM, 146.79.

Repeaters: 52.37/53.37, 146.19/146.79,
146.31/146.91, 222.50/224.10 Xlink, 222.74/
224.34, 449.75/444.75, 1272.1/1292.1.

Membership Info: Ann Herlich/KD4GSU,
(703) 481-1458.

Mailing Address: NVFMA, P.O. Box 486,
McLean, VA 22101.

The next General Membership meeting is January 18, 1996 at 7 PM at the Fairhill Elementary School (Cafe) on Chichester Lane which is off of Rt 50 between the Fairfax Circle & the 495 Beltway in Fairfax, VA. Ask for "drive-in" instructions on the 146.79 or .91 repeaters.

If the weather/road conditions appear poor that day or night, listen to WTOP, 1500 kHz for possible cancellation of the meeting!

One of the topics of this meeting will be selection and election of three Board of Directors. If you have any person in mind, please contact Rick Van Doren, KB4NRU as early as possible. This will give Rick a chance to make up ballots prior to the meeting.

Please keep in mind that your candidate Board members should be 'proactive' and able to make many, if not all, board meetings. The success of NVFMA relies on enthusiastic & active HAMS who are willing to participate in many activities.

CONGRATULATIONS!!! to Wally Straight, N3HMS for naming our newsletter, the "WATTS NEW". This winning name won Wally a KPC-3 TNC! So it shouldn't be too long before you see N3HMS on the packet networks.

I want to thank those NVFMA members for sending in their renewal 'dues'. Your continued support is greatly appreciated. Also, I want to take this opportunity to welcome our new members! We hope you enjoy use of our very fine system of repeaters!

Hope everyone had a very Merry Xmas & we'll be looking forward to seeing you all at the January 18th, '96 meeting; as usual, there'll be interesting topics of discussion, refreshments, and door prizes.

73's, Ann, KD4GSU, Secretary



Prince George's Wireless Association

Meetings: First working Tuesday of each month, 7:30 PM; American Red Cross bldg., 6206 Belcrest Rd, Hyattsville, MD 20782

Club Station: K3CEZ

Mailing: 4109 Kennedy St., Hyattsville, MD 20781

Information: Frank Holton - WA3ZMW
(301) 927-1245

PGWA had it's monthly meeting on November 7th, 1995 at the Prince George's Chapter of the American Red Cross building in Hyattsville, MD.

There was a fair turnout of members. The regular business meeting took place with some discussion of activities for the 1996 season.

Frank Holton, WA3ZMW, Club President brought his TV and VCR. and showed a tape for upgrading to those who are interested in an Advanced Class Amateur Radio License. The tape was clear, concise and narrated.

An election of Club Officers was held and the slate remains the same for 1996. Frank, WA3ZMW, President, Dave WB3KX1, Vice President, Charles KA3COT, Treasurer and Ken, N3HLY as Secretary.

The December 6th meeting will be our Christmas social with an exchange of gifts from our old electronic goodies boxes. Numbers will be given out and then drawn from a hat, Frank will bring a video tape and refreshments are also in order. Dues are now in order and being accepted. Happy and Healthy New Year to all.

73s from Ken Easton N3HLY



Shenandoah Valley Amateur Radio Club

Meetings: First and Third Friday of every month at 7:30 p.m. SVARC Club House 2921 Grace Street, Winchester, Virginia

Repeater: 146.22 In/ 146.82 Out

Net: Shenandoah Valley Emergency Net (SVEN) 7:15 daily on 146.22/146.82 Repeater

Mailing: P.O. Box 139 Winchester, 22604

President: Fred Wetzel (W4KRT)

Info: George Ritter W4UGX (703) 662-0157

Greetings once again from the Northern Shenandoah Valley! The SVARC is starting off 1996 with a new slate of officers. They are:

President: Fred Wetzel (W4KRT)

Vice-President: Irvin Barb (KD4BHV)

Secretary: Shane McWhorter (KE4ORH)

Treasurer: Janie Wetzel (KA4HOP)

We welcome our new officers and look forward to a fun 1996.

December was pretty slow for the SVARC. The club Christmas party was held at the clubhouse on December 15. As usual, we ate far too much and stayed up way too late. But, we had lots of fun.

On Christmas Eve, several club members participated in the Santa Net. This event is such a treat to listen to. This year we heard many cute "requests" from Santa Claus from the children. There were also a few truly heart warming moments. If you've never listened or participated in the Santa Net, mark it on your calendar for next year. It is truly a rewarding event.

Plans for the new year include continued development of our new repeater site and work on our new repeater. Back around the end of November, our new repeater was on the air for a short while for testing. It croaked, literally! Since it is controlled by a DOS-based computer, there is quite a bit of flexibility available to us now. I guess that includes the sound for the courtesy tones, too! We also have plans to finish installing packet stations at area hospitals.

I hope the new year is a good year for all other FAR member clubs! Until next month...

73 de KE4QJT/Laura Stewart



The Middle Atlantic FM and Repeater Council, Inc.

Meetings: Coordinating Committee (CC) normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue. Talk-in on 147.18.

Address: P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

The Annual Meeting of November 5th at Frederick, Md., brought a great membership turnout. A current T-MARC Repeater Directory was passed out, and all reps were asked to make

sure their repeater listings were correct. The corrected data will be used for the 1996 edition of the ARRL Repeater Directory.

A by-law amendment to Article V, Section 5, setting term limits was adopted, reading "No officer or director, other than the Secretary/Treasurer, may be elected to serve more than 2 consecutive terms in the same position, unless there is no other nominee." Another by-law amendment was proposed which would prohibit sponsors of uncoordinated repeaters from serving on the Board. After extensive discussion, this motion failed. A couple of clubs questioned last year's increase of membership dues. After discussion and analysis of operating expenses, the membership reaffirmed the current dues structure. And a motion to discontinue listings in the Repeater Directory of proposed repeaters which are not yet in operation also failed. The membership approved a sponsorship transfer of the 448.125 repeater near Frederick, Md., from WA3OHI to MADRA.

A discussion of packet spectrum usage, led by Ross, WA2WDT, resulted in adoption of a motion directing the Board to implement a plan for packet coordination. Sean, WD4RPV, near Winchester, Va., will lead this project. He would like all packet sysops, including DX-cluster and BBS sysops, to contact him with basic information about their systems, including all frequencies you are using. Please note that any "confidential" information will be kept in strict confidence. We will be working closely with D.M.A.R.C. and any other packet groups in our area, as well as maintaining close liaison with adjacent area packet coordinators, and hope the results of this project will benefit both the packet community and all other users of the VHF and UHF bands. Send your info via packet to "WD4RPV@WD4RPV.#nova.va" or internet to "smcclana@crosslink.net".

Election of officers for the next year resulted in the following being reelected: Owen-K6LEW, President; Gary-W3DTN, V.P. - P.R.; John-K3HOI, Secretary/Treasurer; Larry-WA3KOK, and Sandy-WB5MMB, Directors. The following new officers were elected: Bill-W8HNT, V.P. - Tech. Ops. (Bill

will also serve as the new chairman of the coordinating committee); Bill-W3EAO, Director. W8HNT, our new coordinating committee chairman, is looking for someone to volunteer to help with some secretarial work for the committee. If you have some time available, we can sure use some assistance.

Our Ombudsman Jim, K3LFO, asked for volunteers from throughout the entire TMARC area to assist him in verifying repeater activity. His project is intended to help weed out the "paper" repeaters from our database. If you can help Jim, please contact him direct.

All in all, it was a very good meeting. T-MARC will continue to serve our constituents, but we are still in need of some assistance. So if you have some time available, let us know.

73, Gary, W3DTN, T-MARC PIO



Vienna Wireless Society

Meeting: 7:30pm second and fourth Fridays of the month at the Vienna Community Center.

Nets: Pow-Wow nightly at 9 pm. on 28.444 MHz. Slow speed code, nightly 8:30 pm on 28.390 MHz. Vienna Emergency Net, Wednesday 7:30 pm 146.085/146.685

Repeater: K4HTA 146.085 in/146.685 out

Information: Paul, AB4CY, (703) 560-2779

Mailing: P.O. Box 418 Vienna, VA. 22183

Vienna Wireless starts off the new year with big plans. The new officers are: President Paul, AB4CY, Vice President Brian, KD4QVT, Secretary Pat, KA4FHK, and Treasurer Donna, KE4FYM. Many thanks to the 1995 crew for winding up our 32nd year in traditional fashion.

Our new Vice President, Brian, is coming in to help us get a recruitment program underway. Brian

is a high schooler who took on the Novice tent at Field Day two years ago and graduated to Band Captain for 20 meters last year. He is the club's youngest member and entered hamming through the club training program.

A lot of effort is going into our VWS 20th WINTERFEST to be held Sunday, February 25th, at the Community Center in Vienna. We're encouraging attendees to use the free parking at the Vienna Metro station and use the free shuttle bus to the Hamfest site. Hope you will plan to attend. It's always a good show rain, snow, or shine. More information will be distributed next month.

It's dues time again at VWS. It is interesting to note that out of our 175 members about 15 percent are non-resident. We still have a number of active members who were instrumental in founding the club more than 30 years ago.

With the winter storm season upon us, Skywarn stands ready to assist NWS in reporting severe weather effects. A number of club members participate in this ever growing activity. It seems to have been quite beneficial to the weather Service in providing the type of information available from no other source. A quick listen on 147.30 when the net is activated will demonstrate the operation of a multi station, multi repeater, and multi mode mix of participating stations.



Woodbridge Wireless, Inc.

Meetings: Second Tuesday of each month at Springwoods and Chaucer, Lake Ridge, VA.

Net: Monday nights at 2000 on 147.24 with 224.78 link repeater on 147.24 MHz, 144.99 MHz simplex PL-100 repeater 444.90 MHz, repeater 224.780 MHz, packet lan on 145.07.

Mailing: PO Box 112, Woodbridge, VA 22194

Information: Jim Stearns, KC4ZHQ (703) 670-3480.

WWI held its regular monthly meeting on Tuesday, 14 November 1995, at the Canterbury Woods Recreation Center in Lake Ridge. Club President, Paul N3DAN called the meeting to order at 7:30pm. It appears that the snow, sleet and rain had little effect on the attendance as 45 members attended the meeting.

The WWI 94 Sweepstakes Plaques were awarded. Multi-Op CW went to NJ4F, K5IMC, N4GUS, and K8EI. Single-Op CW went to WB4NFS. Multi-Op Phone went to WD4KXB and KJ4VG. Single-Op Phone went to KA4RRU. These plaques are engraved with each persons name and call. The recipients keeps the award for one year.

In other club activities, Jim, WD4AIR, reported that the WWI No-Code Technician/Novice Class is underway and progressing on schedule. K8EI, Loyd donated a dual band mobile radio to the emergency bus. WD4KXB, Denis reported on the status of the WWI Membership Roster and data base update. New roster will be available after the first of the year. Nick, K4EBY reported that the packet station is up and running and invited everyone to give it a try. Saturday, November 18 and Sunday, November 19 had WWI supporting two community activities.

The first Santa's Old Bridge Parade was conducted on Saturday, November 18, at 1000. Emergency communications was provided by WWI members KD4KBT, Ed (coordinator); KD4NFB, Aaron; WD4EAT, Larry; KA4ADP, Joan; KR4KF, Bob; WD4AIR, Jim; and AJ0C, Rob. Although no emergencies took place it would have been difficult for the parade to be as successful as it was without the WWI members assistance.

The most difficult part was getting all units at their starting positions. During the parade AJ0C, Rob provided up to date information on the units in the parade to the TV crew that taped the parade while KR4KF, Bob, provided the same information to the reviewing judges. All under the cool, calm, guidance of KD4KBT, Ed. The Parade was a Hugh success.

WWI members provided emergency communications support to the Lake Ridge Runners Club on Sunday, November 19, 1995. The support was for a 10k race and a 1 mile Fun Run. Members supporting this activity were KR4KF, Bob (coordinator); N4LJS, John; WA2IKI, Dale; WD4AIR, Jim; AJ0C, Rob; AC4QO, Bob. The 10k started at 0830 and was run without difficulty. The Fun Run began at 1035 and thanks to AC4QO, Bob, the turnaround point was marked before the runners arrived. WWI members provided valuable assistance to the Runners Club by keeping track of the lead runner and providing assistance in keeping all runners on the course. These two events are yearly events and are examples of the public service that is provide by the club. I would like all of you to participate in these events. It is a good way to pay back the community. Let's get involved, 73 KR4KF, Bob.

Paul, N3DAN, gave a presentation on QRP Radios. With the aid of view graphs, Paul discussed the operation of a QRP station. He pointed out that the first thing anyone contemplating a jump into the QRP sport should do is cast off the notion that you must run high power (QRO). A more enlightened attitude is needed. Consider your QRP operating as an adventure, a challenge, a unique and very personal voyage on the airwaves—riding a leaf instead of a supersonic jet. It's a gentle form of communication; think "heart and soul,; not "blood and guts. "Shoot down your DX prey with a pea-shooter rather than a double-barrel shotgun. A positive frame of mind will set the stage for an enjoyable time with QRP. He stressed some of the more important grounds rules are: (1) Listen, listen, listen; (2) Call other stations; don't call CQ; (3) Expect less-than-optimum signal report; (4) Be persistent and patient; and (5) Know when to quit. Paul put up a wire antenna inside the meeting room and had seven different models of QRP rigs for us to operate doing the break. I think everybody enjoyed the presentation but we did miss some of it.....we could not hear him...Hi Hi

73, Jim, KC4ZHQ, WWI FAR Rep.



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Jerry - NU3D at (410) 761-1423 (Anytime)

Silent Key

Philip S. Rand, W1DBM, died november 27, 1995, in Lebanon, New Hampshire, after a brief illness. He was born in Newtonville, Mass and was 89 years old. He was an electronic engineer for the Remington Rand Corp in the late 1940s, when amateur radio faced a crisis in the form of interference to the early VHF television sets. Rand worked with the ARRL to develop TVI Suppression techniques for channels 2 through 6. ARRL's then technical editor George Grammer, W1DF, designed high pass filters for the primitive TV sets, while Rand developed new methods of shielding for amateur transmitters. Rand published articles in QST spanning 50 years, from "A shack on wheels"

(1933) to "The Beeper, an audible frequency readout for the blind amateur" (1983). During the TVI days Rand lived in Redding Ridge, Ct, and worked closely with ARRL staff member Lew McCoy, W1ICP (now retired). McCoy remembers Rand displaying in his office a computer that used 12AT7 vacuum tubes—it was the famous Univac. McCoy called Phil Rand "My tutor in TV interference." He served as ARRL New England Division Director in 1955 and 1956. In October 1995 he received the President's Award from the Quarter Century Wireless Assoc. Among his survivors are his wife of 59 years, Louise and three Daughters. Funeral and burial were scheduled for November 30 in Haverhill, New Hampshire.



Don't Miss the Bus!



Al Rabassa, NW2M, President of the Montgomery Amateur Radio Club, has coordinated the services of a local bus company to provide luxury bus transportation (with restroom) from the Rockville area to the Dayton Hamfest in May 1996. The plan is to leave the Rockville area at 9pm on Friday, arrive outside of Dayton for breakfast (6am Saturday), and then into the Hamvention Center. Plan to leave 6pm that night, stop for dinner, and back to Rockville arriving 6am Sunday.

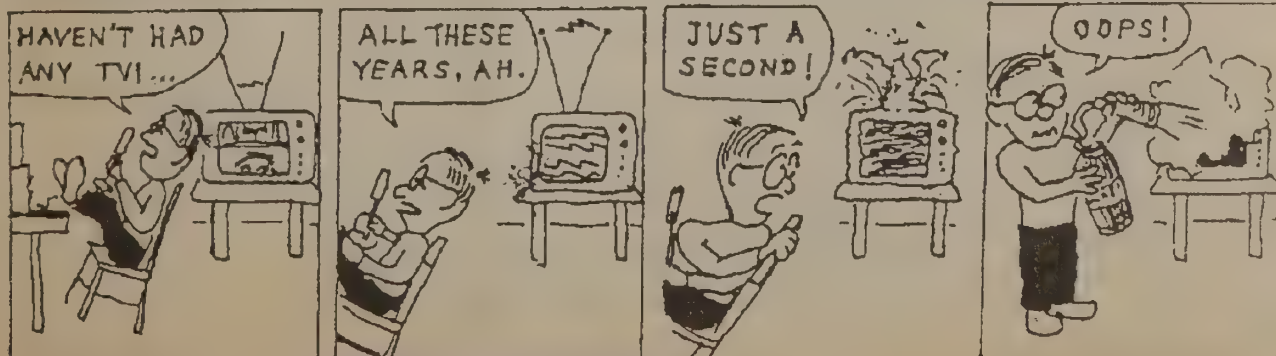
The bus holds 56 people (I may be able to get more busses!) The total cost for the round trip is \$55. Your check will reserve your seat on a first-come-first-serve basis (non-refundable). Do not delay. The cut-off date is Jan 27 1996. My Visa card is holding the bus! Excess seats over the 56 seat count (per bus) will be refunded by mail.

Please make checks payable to: Al Rabassa, NW2M c/o MARC*, PO Box 611, Gaithersburg, MD 20884-0611, Attn: Dayton Bus Trip. (301)294-8621 voice mail, <http://www.dsport.com/marc> for updates.

* This is not an offer on behalf of MARC, or its members. NW2M is simply a point of contact for coordination. Additional details/restrictions may apply.

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FOR SALE: Rohn satellite heavy duty satellite antenna roof mount \$25. Toki collapsable 9 ft satellite antenna \$75. Create CR-30 9"10" roof tower with thrust bearing \$150. Create CLP-5130-2 VHF/UHF log periodic antenna \$75. Ten-Tec Titan Model 425 linear amplifier, export model, \$1900. Drake TR-4310 Transceiver + R-4245 receiver in desktop cabinets \$2200. Yaesu G-5400B Az/El rotor package (for OSCAR) \$275. KLM 2M-22C (2M) and 435-40CX (435 MHz) Oscar antennas, with three fiberglass poles \$250. Butternut HF-2V 80/40M vertical \$75. 2M 2 element cubical quad, 440 MHz 4 element quad \$25 each. Sig, WA9INK, Work/voicemail (703) 875-1014 or (202) 467-0053 home (fax on line - wait for voice pickup). [1/96]

FOR SALE: Kenwood TS-520S, DG5, AT200, MC50, SP520, YG3395C, \$525.00. Kenwood TS-130SE, MC30E, SP120, MB100, PG2S, \$425.00. Kenwood R2000 with VHF, has been modified, small damage to speaker grill, \$450.00. Bird 43 watt meter with 5 and 50 watts elements 100 to 250 MHz, \$190.00. Motorola HT600, charger, two

batteries, accessories, \$175.00. MFJ-1702-B two position antenna switch, \$14.00. MFJ-1701 six position antenna switch, \$25.00. Belden stranded unused RG-58A/U 59 feet, \$10.00. Rotor cable, new 3 wire 55 feet, \$6.00. Radio Shack new outdoor FM antenna 15-2164, \$7.00. Reasonable offers considered also. Greg, KA3DBG, Rockville, (301) 946-6460. [1/96]

WANTED FOR CASH: Antenna Tuner up to 1500 Watts, Nye, Heath, Johnson Jr., Murch, Millen, etc. Need Kenwood receiver R599, transmitting triodes 211, 843, 292, 913. Western Electric 274, 350 A or B 12By7, 6145s. Buying Military Surplus, Jan receiving, transmitting, Buying Colling receiver, 51J 3 or J4. Also Collins KWM1 transceiver. Milton LEVY W5QJT. 2042 Austrilia Way West, #8, Clearwater, FL 34623. Telephone (813) 791-4730 anytime. [1/96]

FOR SALE: L7 linear amplifier w/Drake LPS power supply and Drake MN 2700 antenna tuner. All in new condition. Best offer. Edwin Speakman, W3AUR. Phone: (703) 780-3970. [1/96]

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FOR SALE: Kenwood TS-850S with 3 filters \$1,250.00, Drake TR-7 with Power Supply & 2 filters \$575.00, Drake RV-7 VFO \$85.00, Drake CS-7 Coax Switch \$60.00, Palomar Engineers 1.8-54 Mhz Preamplifier \$50.00, Tri-Ex W-67 crank-up tower with electric motor winch 67 feet & rotor \$850.00, Titan Linear Amplifier model 425 \$1,900.00, Yeasu Transceiver FT-757 \$500.00, all items pick-up only. Call Willie, WIZX between 8 to 10:30 pm at (301) 645-5584. [1/96]

FOR SALE: Icom AT-500 antenna tuner, mint condition in box \$380.00. John, KAØSEY, (301) 855-0198. [1/96]



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[SWP]



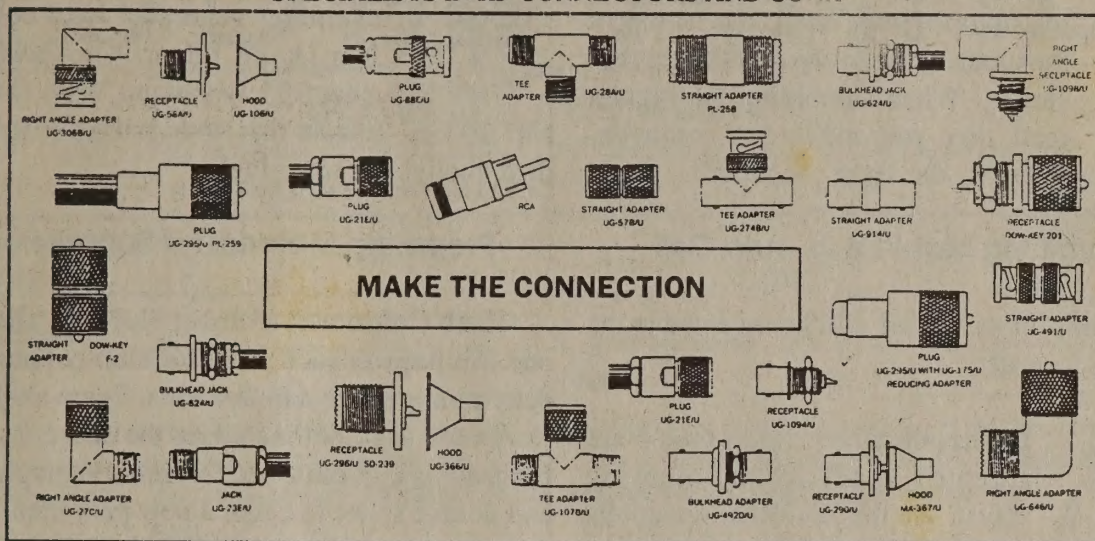
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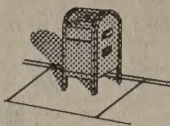
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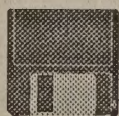
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Computer Disk: Submissions are accepted on 3.5" or 5.25" computer disk, in either Macintosh or MS-DOS format, using Word, WordPerfect, or standard ASCII text files. Write your name, telephone number, and club name on the disk. Submit graphic files (club logos, etc) in an EPS or TIFF format. Please verify the readability of your computer files before sending. If you want your computer disk returned immediately, include a SASE envelope with .32 postage. Otherwise, disks will be returned only in person at FAR meetings.

Preparing Material for Submission

Club Columns: Member clubs are allocated one full page in each issue for club columns. In determining space requirements, figure about 700 words per page not including the space taken up by headings, photos, etc. Indent paragraphs .25" and double space to begin a new paragraph. Send club header information ONLY when different from what was published from previous month.

Hamfests/Events: Member clubs are allocated one full page per year to promote one club sponsored hamfest, convention, or special event. Submit clean black & white camera ready copy only by mail. Master copy should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary. Electronic submissions of Hamfest ads will not be accepted.

Photographs: The editor will select the best photograph submitted for the cover each month. Photographs should depict club members, club stations, or amateur radio related events that are current and noteworthy. Clubs may also submit photographs for inclusion with their club column. Photographs will be used in columns when space permits. Either B&W or color photos can be used. For each photograph submitted, write your name, phone number, and club name, along with a description of the photograph on a piece of paper, and tape it on the back of the photograph. Do not write on the back of your photo. If you want your photos returned immediately, include a SASE envelope with sufficient postage. Otherwise, photos will be returned only in person at FAR meetings.



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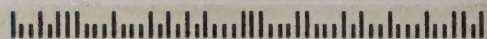
Area Club Meetings - January 1996

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
	1 NEW YEARS	2 DOSARC Antietam PG Wireless	3 Baltimore Montgomery	4 Anne Arundel	5 Mobileers Shenandoah	6 Green Mtn.
7	8 Carroll Co.	9 Fauquier Frederick Woodbridge	10 FAR - VA	11 MADRAS Mid-Atlantic Mt. Vernon	12 VOA Vienna So. Maryland	13 North Point
14	15 OVHA Sterling Park	16 Antietam Arlington	17 Goddard BARC/QCWA HEMARC Montgomery	18 Anne Arundel	19 Shenandoah	20 Capital City
21	22	23 Columbia	24 Moose Laurel	25 MADRAS St. Mary's	26 Central MD Vienna	27
28	29 Green Mtn. T-MARC	30	31 Carroll Co.	 Happy New Year's!!		



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